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PLANNING, PLAN IMPLEMENTATION

Voronin Highlights 1990 Plan

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in Russian No 12, Dec 89 pp 3-14

[Article by L. Voronin, first deputy chairman of the USSR Council of Ministers: "The National Economic Plan—Realism, Tasks, and Guarantees"]

[Text] I would like to note first of all that the country's State Plan for Economic and Social Development in 1990 has been taken up in sessions of committees of the USSR Supreme Soviet and standing commissions of the Council of the Union and Council of the Nationalities with greater interest and more thoroughly and exactly than ever before, and alternative solutions and well-argued proposals and recommendations have been advanced. Most of the commissions and committees displayed a judicial approach to evaluating the planning projections presented, a mastery of the real state of affairs in the economy and the social sphere, and an understanding of the capabilities of the state in dealing with the specific problems of the country's economic and social development in the present stage. Members of the USSR Government and heads of ministries and departments took part in this work, which made the entire effort to draft the plan constructive. In the course of discussion, a number of additional measures were proposed concerning the most acute social and production problems.

The USSR Council of Ministers has studied them carefully, and some of them have been adopted. Some of the suggestions will be met in the regular course of business by the USSR Government, the councils of ministers of union republics, and USSR ministries and departments. Proposals and recommendations which are to be implemented during preparation of the draft of the State Plan for the 13th FYP represent a separate group.

The majority of the proposals submitted by the commissions and committees reflect the need to solve the problems of society's social development, to strengthen the social protection of the most vulnerable strata of the population, to saturate the consumer market with goods and services, to speed up even more the construction of housing and cultural and everyday service facilities, and also to guarantee employment of the population and the development of public education, health care, and culture.

A number of proposals concern the projections of capital construction, the agroindustrial and other national economic complexes, physical and financial balance, and also foreign economic activity.

The commissions and committees expressed serious concern about the state of affairs that has come about in the fuel-energy, wood-chemical, and machinebuilding complexes as well as about the failure to fulfill the planning targets of the current year for the country's

national economy as a whole. They emphasize the need for speedy restoration of proper order in production, radical improvement of its organization, a bolstering of discipline in contract performance, work and production, and reduction of various types of losses so as to stabilize operation of the economy and build a reliable base for effective development of the country in 1990 and the 13th FYP.

The USSR Council of Ministers adopted a number of the proposals of committees and commissions concerning a supplementary rise in the standard of living of the people in 1990. It is proposed that funds be increased for the following by discovering additional sources of budget revenues:

- introduction of paid leave for infant care up to the age of 18 months and also for an increase as of 1 January 1990 of survivor pensions of deceased military personnel and field personnel in the system of the Ministry of Internal Affairs and introduction of a uniform pension level (70 rubles) for disabled persons in Group II from childhood;
- an increase in standard food consumption allowances in boarding schools, standard money allowances for clothing, footwear, rugs and draperies for boarding schools and children's homes, a rise in the standard allowance for major and current repairs of schools and children's homes, an increase in the wages of cultural workers in rural localities, as well as concerning a number of other matters related to improving the financing of public education and culture.

It is proposed that substantial additional resources be allocated to finance health care, including a rise in standard rates of food consumption in maternity homes and departments in children's hospitals, endocrinology departments, children's sanatoriums, and day infirmaries and to provide gratis outpatient treatment of patients with chronic irreversible diseases.

What is more, funds have been found for fuller satisfaction of the social needs of railroad workers and to increase the per diem of operational personnel of law enforcement agencies.

The USSR Council of Ministers concurred in the proposals of committees of the USSR Supreme Soviet and its standing bodies to reduce the rates for electric power delivered to the rural population during the day from 4 kopecks to 1 kopeck per kilowatt-hour. This decision required a corresponding increase in electric power rates for the entire economy except the municipal service and residential sector.

The sum total of expenditures to carry out all these additional measures is 3.6 billion rubles. Thus, the total expenditures of the state to carry out centralized measures to raise the standard of living of the population in 1990 have been raised 40 percent over the draft and amount to 13.4 billion rubles. Never before, even in the most prosperous years, has our state allocated such

substantial resources to carry out social measures. Over the entire 12th FYP as a whole, plans call for spending 16 billion rubles for these purposes.

During discussion of the draft plan, consideration was also given to such very important social problems posed in the decisions of the First Congress of People's Deputies of the USSR as a sound minimum wage, indexing personal income because of inflationary processes, expanded use of planning methods based on standard programs in order to solve social, environmental, and other problems. This has made it possible to work out appropriate approaches to working up the draft plan for the 13th FYP. USSR Goskomtrud and USSR Gosplan, along with the relevant ministries and departments, have been ordered to work out a mechanism for indexing the income of various social-demographic groups of the population so as to take into account the dynamic behavior of consumer prices, and USSR Goskomstat has been ordered to publish the income index.

The USSR Government has also ordered USSR Goskomtrud, USSR Goskomstat, and councils of ministers of union republics to complete in the 1st half of 1990 the drafting of minimum consumer budgets for various social-demographic groups of the population and regions of the country so that planning authorities can use these budgets and also the minimum income levels of families, of remuneration, of pensions, scholarships, and other social payments and benefits developed on the basis of them in shaping the draft plan for economic and social development over the period 1991-1995.

During discussion of the draft plan, it was noted that the problems of eliminating women from jobs with heavy physical work and harmful production conditions must be solved speedily. The USSR Council of Ministers ordered USSR Goskomtrud to join union republics and the affected organizations in drafting and presenting in the 1st quarter of 1990 a program for improving the status of women in the USSR, including matters related to the family, motherhood and childhood, workplace health and safety for women and protection of their health, and support for the household and everyday life.

The conclusions of the committees and commissions of the USSR Supreme Soviet noted the urgency of guaranteeing optimum employment of the country's population in view of the socioeconomic and demographic peculiarities of the development of the union republics. This problem has taken on particularly great importance in such labor-surplus areas as the Transcaucasus and Central Asia. The development of market-oriented economic relations and regional cost accounting (*khozraschet*) can be expected to aggravate this situation even in other regions of the country, and this will require the adoption of urgent measures.

At the present time, there is essentially no employment department in the country. The job placement offices and centers that have been created perform very limited functions related to the registration of individuals

looking for work and their assignment to enterprises. In view of all this, the USSR Government has ordered USSR Goskomtrud to join the councils of ministers of union republics in drafting a State Program for Employment of the Population, providing in it for creation of a special fund for vocational guidance and aid to the unemployed population, vocational training and retraining of displaced workers, fuller participation in social production of the population of labor-surplus regions, and further improvement of the working conditions of workers in the production workplace.

Plans call for creating cost-accounting centers for retraining the population in labor-surplus regions. These centers would receive funds from the State Employment Fund. Plans call for creating them in the republics of Central Asia even during 1990.

In addition, statistical reporting being introduced will be used to work out the balance of labor resources in a breakdown by sex and age for all strata of the population and also by regions of the country.

USSR Gosplan and the councils of ministers of union republics have been ordered to draft for the 13th FYP a program for development of the network of preschool institutions so as to take into account the proposals adopted by the commissions and committees. The program must take into account the ethnic features and traditions in the regions of the country and also the social measures that can be accomplished now, in particular, measures to increase the length of leave for child care to 3 years, the practice of organizing kindergartens and day nurseries at home, expansion of the network of year-round and seasonal preschool institutions by transferring vacant administrative buildings for these purposes.

On behalf of sounder development of the system of public education, an effort is near completion to work out the basic standards as to the adequacy of public school institutions with respect to plant and equipment, including computerization, which will be used in shaping the draft plan of the 13th FYP.

Much attention has been paid to the problems of developing production and providing medicines and medical equipment to the health service.

Plans call for increasing the production of medical equipment in 1990 by 1.6 billion rubles, i.e., one-third more than in the 1989 plan. In addition, its output will be increased by an additional 500 million rubles in 1991.

The measures to increase the production of consumer goods aroused sharp debate during consideration of the draft plan. On the one hand, it was noted that the volume of production of goods for the public is still inadequate, so that there cannot be any very rapid improvement in the state of affairs on the consumer market. On the other hand, doubt was expressed as to the realism of the state orders which have been outlined for deliveries of these products. Additional work on this question has shown

that the plan is stretched to the limit in this direction, takes into account every possibility both for production and for the purchasing of imports, and assuming normal organization of the effort it can be fulfilled. The planned amounts of consumer goods in a number of cases, above all concerning the first necessities, the strain on supply of the public will be relieved.

During discussion of the volume of output of the various consumer goods, it was pointed out that production is not sufficiently linked to physical resources. Emphasis was rightly put on the incomplete supply of cotton and wool for production of products of light industry. In order to make up the missing 432,000 tons of cotton fiber, USSR Gosplan was ordered to prepare proposals to delay to a later period the return of this cotton to the state reserve and to reduce cotton exports in 1990 by 100,000 rubles.

In addition, USSR Gosplan was ordered to deal with the question of additional purchases of 20,000 tons of imported fine wool and 9,000 tons of jute, as well as to reduce by 2 million pieces exports of large rawhides, which substantially improves the supply of raw materials to light industry.

Particular attention is paid to the retooling of the enterprises of light industry and to ensuring the activation of the planned capacities and delivery of the necessary raw materials.

A system of priorities has been envisaged to furnish material resources for the production of consumer goods by other sectors of the economy, and they will be earmarked for allocation to enterprises to the full extent of their need.

Major measures have been envisaged with respect to the construction of housing and municipal service facilities. The most optimum possible activation of housing has been outlined in the volume of 144 million m² of total floor space, or 2.4 million apartments, for which the supplies, equipment, and financial resources have been furnished.

The conclusions of the commissions and committees advanced additional proposals to speed up the supply of housing to the public. To be specific, it has been proposed that a procedure be worked out for transferring a portion of the housing stock from state ownership to cooperative and personal ownership. The USSR Council of Ministers concurred in this, but feels that it would be best to prepare such proposals after the USSR Supreme Soviet has adopted the Law on Property and also the Law on the General Principles for Restructuring Management of the Economy and the Social Sphere in the Union Republics and the Law on the General Principles of Local Self-Government and the Local Economy.

In connection with the reduction in the size of the USSR Armed Forces, there is now a more acute problem of supplying housing for members of the officer corps transferred to the reserves or retiring. In all, apartments

have to be furnished to 65,500 such families in 1990 and 1991, and that will require about 1 billion rubles of capital investments. In view of the urgency of solving this problem, it seems necessary to permit executive committees of local soviets of people's deputies to hold back as much as 5 percent of the total floor space of housing to be activated regardless of the department to which it belongs and the sources of financing (with some exceptions), including housing financed with the resources of enterprises over and above the levels envisaged by Decree No 734 of the USSR Council of Ministers dated 7 September 1989.

During discussion of the draft plan for 1990, serious objections and substantial additions were made concerning development of the various national economic complexes.

With respect to the **fuel and energy complex**, provision has been made to accumulate reserves in the amount of 92.6 million tons of standard fuel in 1989 for use in the 1st quarter of 1990 to guarantee stable fuel supply to the economy. The reserves are intended to offset possible deviations in fuel and energy consumption in the amount of 23.55 million tons of standard fuel.

The Byuro of the USSR Council of Ministers for the fuel and energy complex has issued an order to prepare proposals in the 1st quarter of 1990 concerning further development of the country's electric power system in view of the adverse attitude toward construction of atomic and hydro power stations and other thermal power projects that has developed recently in many regions. Given the conditions of our country, with its predominantly harsh and cold climate, this situation is arousing serious concern. For that reason, all further projections of the socioeconomic development of the country's regions and of the work load on the available population will be examined in a general mutual relationship to creation of the necessary thermal and electric power capacities in the relevant regions and linked to revision of the USSR Energy Program and the draft of the Basic Directions for the Economic and Social Development of the USSR Over the Period 1991-1995.

Provision is made to stimulate the delivery of petroleum and gas condensate for export to obtain foreign exchange at the expense of the state order in the amount of 5 percent of the foreign exchange proceeds and to a greater extent so that petroleum is produced and delivered over and above the state order.

Metallurgical complex. In connection with the proposals for acceleration of the construction of metallurgical projects, USSR Minmetallurgiya, USSR Minmontazhshtroystroy, and other relevant USSR ministries and departments are ordered to carry out measures to guarantee activation by the end of 1989 of the metallurgical complex at the Volga Pipe Plant for the production of pipe billets, casing pipe, and oil pipeline pipe, and also the pipe casting shop at the Lipetsk "Svobodnyy Sokol" Metallurgical Plant.

Wood-chemical complex. Great concern has been aroused by the restriction of the scale of construction of chemical facilities in many regions of the country. Accordingly, the government has ordered USSR Gosplan and USSR Minkhimneftprom to examine further the list of construction projects to be mothballed in 1990 and which have been supplied complete imported equipment, so as not to allow adverse consequences in the 13th FYP for development of priority branches of the economy because of reduced deliveries of progressive chemical products.

Agroindustrial complex. The draft plan for the economic and social development of the USSR in 1990 calls for essential measures to strengthen the material and technical base of the agroindustrial complex and for social development of rural areas.

In spite of the great strain on the country's investment projects and physical resources, they have been allocated to the agroindustrial complex in full conformity with the 5-year plan or above. Whereas for the economy as a whole capital investments have been reduced from the 5-year plan, in the case of the agroindustrial complex the allocations are 1 billion rubles greater.

Enterprise plans call for manufacturing in 1990 agricultural machines and equipment for kolkhozes and sovkhozes in the amount of 7.1 billion rubles, which is 15 percent more than in 1989. USSR Gosplan and USSR Gossnab have broadened the composition of the state order for delivery of a number of pieces of equipment to the APK, including feed harvesters and grain-cleaning and drying complexes, feed-harvesting combines, mowing machines, balers, and other machines. The volume of deliveries of Soviet-made processing equipment in 1990 will reach 2.4 billion rubles, 1.4-fold more than last year. In addition, deliveries of this equipment imported from the CEMA member countries amount to 550 million rubles.

Deliveries of industrial refrigeration equipment to the APK are growing substantially.

Agriculture will receive manufactured fertilizers and chemical feed additives at the level of 1989—27.8 million rubles.

USSR Gossnab has been ordered to find additional material and technical resources in amounts guaranteeing fulfillment of construction and installation work financed from the "own" resources of agricultural enterprises and organizations in the amount of about 1.5 billion rubles.

There have been additional increases in allowances for delivery of motor fuel for agricultural operations by 1.5 million tons on the basis of a reduction of its delivery for export.

Agriculture is being allocated an additional 2.4 million tons of cement, more than 600,000 tons of metal, and 330,000 tons of steel pipe.

Deliveries of trucks are increasing by 15,000 (at the level of the 5-year plan), and YuMZ tractors by 3,000. There will also be increases in deliveries of automobiles by 5,000 and buses by 1,800. There will be some increase in the volume of delivery to the APK of truck cranes, self-propelled graders, tires for motor vehicles, and a number of chemical raw materials.

USSR Gosplan, the councils of ministers of union republics, USSR Mintorg, and Tsentsosyuz have been ordered to increase the sale of automobiles for personal use of agricultural workers through redistribution.

The USSR Council of Ministers has also taken up the question of writing off the financial debt of kolkhozes and sovkhozes to the state in connection with the spread of the new forms of economic activity so that the transition to leasing and other progressive forms of the organization of agricultural production is not held up by those problems. These matters will be prepared for elaboration and solution in the next 5-year plan, but in 1990 a number of practical experiments have to be carried out in that direction.

Defense complex. The State Commission of the USSR Council of Ministers for Military and Industrial Problems, USSR Gosplan, and the ministries of the defense branches of industry have been issued an order to envisage when they prepare the plan for conversion the use of capacities made available to increase the output of civilian products that conform to the profile of specialized equipment being produced (civilian shipbuilding, airplane building, etc.), consumer goods, manufacturing equipment for the processing branches of the agroindustrial complex, enterprises of light industry, trade, and the food service industry, environmentally clean power generating units, medical equipment, and other civilian equipment.

By order of the government, the USSR Ministry of Defense, jointly with USSR Gosplan and USSR Minfin, is preparing measures to find funds in the amount of 1.2 billion rubles in appropriations planned for defense to improve the household and social conditions in the everyday life of military personnel and members of their families.

Railroad transportation. In order to prepare rail transportation so that it can carry a higher volume of traffic of goods of the economy in 1990, measures are being taken to improve the working and living conditions of railroad personnel, to strengthen the material and technical base of the railroads and to improve the technology of the transportation process.

The following are specifically envisaged:

- additional payment of workers in the principal activity of railroads and subways for work on the night and evening shifts;
- meeting the standards in effect with respect to the size of staffs of workers directly involved in guaranteeing the safety of train traffic and serving passengers—

locomotive engineers and their assistants, track assemblers, personnel in car-servicing facilities and car conductors;

- increased delivery of rails and rail fastenings, ties, and bridge girders to the MPS;
- additional lumber for car repairs, rolled products of ferrous metals, gasoline, and cement have been allocated.

Proposals have been worked up for amendments and supplements to railroad charters in order to bring them into conformity with the new economic mechanism and to improve economic relations and mutual accountability between enterprises of the MPS, shippers, and consignees.

Proposals have been prepared for increasing penalties for above-allowance idle time of cars and containers in the autumn and winter period of 1989-1990.

The Ministry of Railways is taking specific steps to improve the use of rolling stock, locomotives, and cars and to guarantee a normal operating situation on the railroads.

The operation of rail transportation is constantly under the unremitting surveillance of the USSR Council of Ministers.

Investment policy. In the plan, the volume of state centralized capital investments for construction of production facilities has been reduced as a whole by almost one-fourth and for a number of national economic plans by about 41 percent.

State noncentralized capital investments for construction of production facilities financed from enterprises' own resources were taken in calculations for the draft plan on the basis of the figures of ministries and union republics, which in turn obtained them from proposals of their subordinate enterprises and associations.

The summary conclusion of the committees and commissions proposed a reduction in the volume of these capital investments by 5 billion rubles. USSR Gosplan has been ordered to make this revision when it produces the plan.

The government has carefully examined the proposals of commissions and committees of the USSR Supreme Soviet concerning increasing capital investments to develop the physical facilities of the health system, public education, and culture. In view of the particular socioeconomic and political importance of accelerated development of the branches of the social sphere, the plan for 1990 envisages an increase of 2.1 billion rubles, or 25.6 percent, of state capital investments for these sectors as compared with actual fulfillment for 1988. But the main problem does not lie in a further gross increase in capital investments on the basis of a reduction going to other sectors, where maximum cuts have already been made, but in efficient organization of the growing program for construction of all social welfare and cultural

facilities right at the local level, assuming an energetic effort in this direction by republic administrative agencies directly responsible for the results of this most important work. The experience of the past year demonstrates that solid additional efforts are needed here.

For example, an analysis of the situation in construction of public education facilities indicates that the councils of ministers of union republics and USSR ministries and departments have not been paying due attention to this important problem. Over the period 1986-1988, about 2 million rubles were not assimilated in the construction of these facilities, and over the first 9 months of 1989 the annual volume of capital investments was assimilated at the level of 60 percent. The number of general public schools and children's preschool institutions activated last year was even lower than in 1988.

Under those conditions, it is not considered advisable to allocate additional capital investments in the amount of 1.2 billion rubles to furnish partial construction for 1991, as has been proposed, on the basis of a redistribution from other branches and sectors. This would squander resources and bring about a further increase in unfinished construction.

It should be noted that the continuing increase in above-allowance unfinished construction is causing everyone serious concern. On 30 September 1989, the USSR Council of Ministers adopted a specific decree aimed at increasing the economic motivation and accountability of customers and contractors for shortening construction time and preventing formation of above-allowance unfinished construction as well as at strengthening monitoring by the banks. These measures include the following:

- conversion of construction organizations to settlement, formation of income (profit) and economic incentive funds after activation of enterprises, distinct stages of construction, and facilities—on the basis of the end product;
- financing of the costs of construction organizations until the final construction product is delivered to the customer from their "own" resources and bank credits;
- step-by-step transition of construction organizations to construction by the "turnkey" method of newly started residential buildings, schools, and preschool institutions, with a corresponding change in the system for supplying materials and equipment to those projects.

To the end of a more meaningful analysis of the state of affairs and progress in carrying out additional measures to reduce the scale of construction and to normalize unfinished construction, by 1 March 1990 an inventory will be taken of construction projects and projects for production purposes.

The standing bodies of the USSR Council of Ministers for management of the national economic complexes

and USSR ministries and departments, councils of ministers of union republics, and enterprises and organizations, in connection with the sharp restriction on state centralized capital investments, will have to make decisions to mothball and temporarily halt construction projects and other projects with a low percentage of completion and also define measures to reorient certain enterprises under construction toward the production of progressive products, consumer goods, and building materials. The sale or leasing of individual buildings and installations and also enterprises which are in a stage of construction where a new client with the necessary resources would consider it possible to complete their construction in pursuit of his own interests will become widespread.

Additional measures are now being prepared to restore the investment sphere to health.

Provision has been made to restrict as much as possible the number of new starts of projects for production purposes to be financed from state centralized capital investments. Their number includes only enterprises in light industry to create capacities for the production of footwear and leather, the food industry and meat and dairy industry, and other branches of the APK related to the processing and guaranteed preservation of agricultural products, the building materials industry in order to increase the production of building materials, plumbing fixtures, and building devices and utilities, the shortage of which has been holding up the growth of construction of housing and social welfare and cultural facilities, as well as a number of projects in the electric power industry.

However, in spite of the limited resources, ministries and departments continue to pressure for new construction projects, while at the level of enterprises and associations there is an unjustified expansion of the scale of construction work by increasing the number of construction projects.

Foreign economic relations. For the sake of internal consistency of the plan for production of consumer goods, imports of certain raw materials and supplies are to increase by a total amount of 650 million rubles. At the same time, exports of petroleum products will be reduced by 3.8 million tons. The resources made available are being committed above all to supplying motor fuel to the agroindustrial complex as well as to other sectors of the economy.

Environmental protection and optimum use of natural resources. The dissatisfaction with the state of the environment and state of public health in a number of regions of the country is causing ever greater concern, so that it is no accident that the plan contains many proposals for environmental protection which are aimed at speeding up repair of the environmental situation and more optimum use of natural resources. To be specific, measures have been envisaged to increase activation by USSR ministries and departments and by ministries and

departments of councils of ministers of union republics of capacities, natural conservation projects, and installations, including capacities for the construction of gas- and water-treatment facilities, enterprises for raising fish, to recultivate the land, and to reduce overcutting of calculated cutting areas in the conifer forests of the European and Urals portion of the USSR. The question has also been settled of the possibility of reorienting a portion of enterprises in the defense complex to produce equipment and instruments for natural conservation.

The USSR Council of Ministers will examine the draft documents prepared by the relevant ministries and departments concerning introduction of a system of paid use of natural resources and charges for emissions (discharges) of pollutants into the environment.

Some of the issues of environmental protection will be solved in the plan for the 13th FYP and in the long-range State Environmental Program of the USSR, which is now in the final stages.

The plan's material and technical balance. To improve the plan's internal consistency both with respect to centrally distributed materials and equipment and also with respect to resources obtained through direct connections, aside from additional purchases of raw materials and supplies for the production of consumer goods, there will be larger imports of galvanized and stainless steel for food machinebuilding and the needs of capital construction. There is agreement on the question of producing rolled sheet for the production of refrigerators, motor vehicles, and other products from our steel billets at enterprises of certain countries.

The priority conclusion of contracts and priority delivery of all types of products to the APK are being adhered to. The same procedure has been established concerning consumer goods and services rendered to the public.

Measures have been outlined to improve the supply to the public, to lessees and cooperators, and also self-employed persons and organizations engaged in the sphere of services to the public, of material and technical resources thanks to reduction of production stocks and commodity stocks in enterprises, associations, and organizations by the amount of 2 billion rubles (in retail prices), including a 1-billion-ruble reduction in the system of USSR Minoborony. Construction organizations will receive larger deliveries of lumber and cement to build projects in the social sphere.

Under the new economic conditions, the basis for balanced development of all sectors and branches of the economy is the prompt conclusion of contracts for delivery of products and the precise performance of those contracts.

It is becoming especially important in the context of further development of product deliveries on the basis of

direct orders between consumers and supply components not based on limit-allowances to achieve a high level of contract discipline.

The plan for 1990 envisages that outside the sphere of centralized planning and distribution enterprises will be able to independently sell large amounts of raw materials, supplies, and fuel in the total amount of 100 billion rubles. For example, this will amount to more than 4 million tons of rolled products of ferrous metals, about 1 million tons of steel pipe, 2.9 million tons of motor gasoline, 5 million tons of diesel fuel, 484 million tons of coal, and 6.4 million tons of cement. In essence, this signifies the beginning of creation of a market for means of production, whose regulatory mechanism still has to be worked out.

The first steps have been taken in this direction in order to give enterprises greater economic motivation to produce products the country needs. They will be put to the practical test in 1990.

The balancing of physical proportions for the national economy as a whole depends to a considerable extent on full-fledged conservation of raw materials, supplies, and fuel and on reduction of losses and unproductive expenditures at all levels of administration—from the managers of shops to ministries, departments, and union republics.

It has to be stated directly that many complaints about physical balances arise because certain ministries, union republics, enterprises, and organizations did not adopt targets for resource conservation arising out of the 5-year plan and the programs that exist. Managers in the economy complain with increasing frequency about the inadequate supply of resources, but few people are making an effort to tighten the economy regime and reduce losses and unproductive expenditures.

An indispensable condition for the stable and efficient operation of the economy is a radical improvement in work discipline. According to data of USSR Goskomstat, worktime losses—absenteeism, downtime, and permitted absences—in just the 1st half of 1989 increased by almost one-third over the corresponding period of last year. Every day more than 1 million people do not work in industry for these reasons.

At the same time, the amount of overtime is increasing. In 1988, 284 million man-hours of overtime were worked in industry and 170 million in construction. Immense amounts of money were spent to pay for that time, since overtime work is paid at double time. There has to be a sharp increase in the responsibility of work collectives, and the role of enterprise managers has to be enhanced, creating conditions thereby for restoring and maintaining order in the workplace.

The organization of production and of work quota setting must be restructured so as to take the new requirements into account. It is intolerable that piece

rates should have been raised 2-3-fold recently at a number of enterprises without revising the quotas.

The prestige of good workmanship and high productivity also has to be improved. Along with financial incentives for progressive workers, there also have to be nonfinancial incentives.

The thorough critical work on the draft of the State Plan for 1990 has made it possible to evaluate the actual state of affairs in the social sphere and the country's economy in a comprehensive way. The situation is complicated, so that the main thing is to halt a deterioration of the country's economic situation, to create conditions for guaranteeing that the economy and foreign economic relations are restored to health in coming years; to reduce social tension in society by taking immediate steps to raise the standard of living of the people and to normalize the circulation of money; and to bring about the material and economic prerequisites for gradual economic development during the upcoming 13th FYP.

Does the State Plan for Economic and Social Development of the USSR in 1990 meet those requirements? Undoubtedly. Once the corrections and additions proposed by the commissions and committees of the USSR Supreme Soviet have been taken into account, it is realistic, it will have a mobilizing influence, and it is rather well-balanced.

Following discussion in the sessions of commissions and committees of the USSR Supreme Soviet, the State Plan took on a still greater orientation toward social welfare. This conclusion can be confirmed with facts indicating the large structural shifts:

- the share of resources for public consumption and construction of nonproduction facilities in the national income is 86 percent, while only 4 years ago it was barely above 80 percent. Those figures show a turn of our economy toward the needs of man;
- it is planned that the growth rate of production of products of Group B of industry will exceed nearly 13-fold that of Group A. In absolute terms, this means that the output of Group B will grow by 19 billion rubles between 1989 and 1990 in wholesale prices, and that of Group A only 5.6 billion rubles in absolute terms. Moreover, this growth is mainly related to the need to meet the needs of Group B. For the sake of comparison: In 1988, the volume of Group B actually grew 12 billion rubles, and that of Group A 2.2 billion rubles. This indicates the major structural shift in industry to the advantage of man.

These indicators have been backed up with specific steps to increase the production of consumer goods in all national economic complexes. Whereas the total growth of the output of these goods is outlined at 20 percent, in the defense complex the growth will be nearly 35 percent, and in civilian machinebuilding 31 percent.

And then come paid services to the public. The plan calls for a growth of 11 percent. This is twice the growth of the

gross national product. Approximately the same growth has been outlined for retail commodity sales of state and cooperative trade.

Essential structural changes are taking place in imports, whereas 60 percent of purchases represent resources which are to go to meeting the needs of the population.

And finally, shifts in investment policy: 29 percent of capital investments and practically half of the entire volume of construction and installation work are oriented toward housing and facilities in the sphere of social and cultural services.

These are the most important indicators of the intensification of the social reorientation of the Soviet economy, which along with the system for regulating the taxation of the growth of the fund for remuneration, which, incidentally, does not extend to enterprises producing goods for the people, make it possible to begin to stabilize the consumer market.

The plan embodies a sharp change of direction in the processes of conversion, which are taking place not only in the defense complex, but throughout the entire economy: defense expenditures are being reduced by 6.4 billion rubles from the past year, and that money has gone to strengthen the social sphere. All of this indicates many things. There is also evidence of the changes taking place in the fact that civilian products represent half of the volume of production of the defense complex in 1990.

There has to be special mention of the state order, which is aimed at further application to production and the social sphere of the advances of scientific-technical progress which open the way to product quality, resource conservation, and the solution of complicated social problems. Use of scientific-technical advances in the economy makes it possible to save the labor of more than 2.4 million persons in the branches of the production sphere, to make 1.1 million persons employed at heavy physical jobs available for more mental work, and to achieve a saving of 6.5 billion rubles because of reduced production cost in industry alone. State scientific-technical programs, the activity of MNTK's, and the assignments of state orders for science, engineering, and technology are directed toward achieving these results.

In conclusion, we should emphasize that the planning indicators for 1990 are realistic.

As for the plan itself, we cannot fail to note that it is better based than it ever has been. To no small degree, this is because the commissions and committees of the USSR Supreme Soviet have worked thoroughly on all aspects of the country's economic and social development in the coming year.

The plan is better balanced because the resources of the state are being concentrated on dealing with the immediate and truly crucial areas of the economy and the social sphere.

The capabilities of our economy are becoming substantially broader as a number of major production capacities are activated.

With the adoption of a number of exceedingly important laws by the USSR Supreme Soviet, the necessary conditions are being brought about for a further deepening of the economic reform, for real development of the initiative of work collectives, for organizing stable operation of transportation, and for strengthening discipline and order in all other components of the economy and for guaranteeing consolidation of all participants in the production process.

All of this affords the basis for confidence that if work is organized as it should be, if work discipline is high, and if everyone is responsible for the job he is given to do, the State Plan for 1990 will be fulfilled.

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REGIONAL DEVELOPMENT

Estonian Draft Laws Issued

Taxation Draft Law

904A0124A Tallinn SOVETSKAYA ESTONIYA in Russian 14 Dec 89 p 2

[Draft law adopted by the ESSR Supreme Soviet in Tallinn on 6 December 1989]

[Text] The ESSR Law on Taxation establishes the revenues of the ESSR State Budget, the budgets of local self-governments, and special-purpose state funds in the form of taxes and the state administrative fee, whose purpose is to influence the economic activity of juridical and private persons, to ensure that the public enjoys social benefits, and to guarantee economical use of the natural resources of ESSR and protection of the environment.

There is a single system of taxes for all juridical persons of ESSR regardless of the form of ownership, subordination, spheres of activity, and organizational forms, as well as for private persons.

Title I. General Provisions

Article 1. The ESSR Law on Taxation defines the taxes and state administrative fee in effect in Estonian SSR, taxpayers and the objects to be taxed, the general procedure for granting tax benefits, accountability for violation of the Law on Taxation, and the general procedure for resolving disputes that arise in connection with the payment of taxes.

The taxes and state administrative fee established by this Law are paid into the State Budget, special-purpose state funds, or the budgets of local self-government.

Article 2. All juridical persons located on the territory and in territorial waters of ESSR and also private individuals residing or operating here are required to pay the taxes and state administrative fee established in Estonian SSR.

Article 3. Taxes and the state administrative fee are established in Estonian SSR as follows:

- 1) by laws of Estonian SSR;
- 2) by the Government of Estonian SSR;
- 3) by the body of local self-government.

Article 4. The body that has established a specific tax or state administrative fee or the body which it authorizes shall determine the following:

- 1) the rates of taxes;
- 2) the procedure for payment of the taxes;
- 3) tax benefits and conditions for exemption from payment of the taxes;
- 4) the period of the tax's validity.

Article 5. The body of local self-government has the right to establish within its administrative jurisdiction additional taxes besides the taxes enumerated in this Law. One and the same object of taxation may be taxed only once unless legislation provides otherwise.

The Government of Estonian SSR sets the maximum levels of local taxes unless legislation provides otherwise.

Article 6. Taxes must be paid in money that is in circulation in Estonian SSR unless legislation provides otherwise.

Article 7. The procedure for resolving disputes that arise in connection with the establishment of taxes is determined by legislation of Estonian SSR.

Title II. Taxes, the Objects of Taxation, and the Payers of Taxes

1. The Corporate Income Tax

Article 8. The corporate income tax is paid at the established tax rates by enterprises on their income.

The income of the enterprise consists of proceeds from the sale of products and property, work performed and services rendered, as well as other revenues after deduction of the following:

- 1) the value of jobs and services performed by other juridical persons;
- 2) material costs and the equivalent;
- 3) depreciation;
- 4) the social tax;
- 5) the turnover tax;

- 6) the excise tax;
- 7) the customs levy;
- 8) the land tax;
- 9) charges on natural resources;
- 10) the capital tax;
- 11) the entertainment tax;
- 12) state administrative fee.

Article 9. The corporate income tax is paid as follows:

- 1) into the State Budget at the republic tax rate;
- 2) into the budget of local self-government at the local tax rate.

Article 10. The Government of Estonian SSR establishes the following pertaining to the corporate income tax:

- 1) the republic tax rates;
- 2) the maximum level of the additional income tax which may be established by the body of local self-government;
- 3) the procedure for payment of the tax.

2. The Turnover Tax

Article 11. The turnover tax is paid at the established tax rates by juridical persons on the turnover of goods (products and services) they have sold.

The turnover tax is calculated on the value of the commodity sold at the sale price after deduction of the following:

- 1) the value of jobs and services performed by other juridical and private persons;
- 2) material costs and their equivalent;
- 3) depreciation;
- 4) the social tax.

Article 12. The turnover tax is paid as follows:

- 1) into the State Budget at the republic tax rate;
- 2) into the budget of local self-government at the local tax rate on retail turnover within the administrative jurisdiction of local self-government.

Article 13. The Government of Estonian SSR establishes the following pertaining to the turnover tax:

- 1) the republic tax rate;
- 2) the procedure for payment of the tax.

The body of local self-government may set the local tax rate.

Article 14. The turnover tax is not paid on the following:

- 1) on the sale of natural resources;
- 2) on the sale of goods enumerated on the list established by the Government of Estonian SSR.

3. The Excise Tax

Article 15. The excise tax is paid by enterprises on sales on the domestic market of Estonian SSR of goods subject to the excise tax.

Article 16. The excise tax is paid into the State Budget.

Article 17. The Government of Estonian SSR establishes the following:

- 1) the list of goods subject to the excise tax;
- 2) the rates of the excise tax;
- 3) the procedure for payment of the excise tax.

4. The Social Tax

Article 18. The social tax is paid at the established tax rates by juridical persons and other employers on all amounts they pay to private individuals and also by the owners of peasant farms and self-employed persons on their income, if social insurance extends to them and if they are interested in it.

Article 19. The social tax is paid into the off-budget state social fund.

Article 20. The Government of Estonian SSR establishes the following with respect to the social tax:

- 1) the rates of the tax;
- 2) the procedure for payment of the tax.

Article 21. Payments to pensioners of juridical persons and other employers are not subject to the social tax.

5. Charges on Natural Resources

Article 22. Charges on natural resources are paid at the established tax rates by juridical and private persons on the volume of natural resources they use and which are retired from general use as a result of their activity.

Article 23. The charges on natural resources are paid as follows:

- 1) at republic rates of the charges into the State Budget;
- 2) at local rates of the charges into the budget of local self-government.

Article 24. The Government of Estonian SSR establishes the following:

- 1) a list of taxable natural resources;
- 2) the rates of charges on natural resources and the bases of their differentiation;

3) the procedure for payment of charges on natural resources.

6. The Land Tax

Article 25. The land tax is paid at the established tax rates by juridical and private persons who have been granted usufruct of the land.

Article 26. The land tax is paid into the budget of local self-government.

Article 27. The Law on the Land Tax establishes the following with respect to the land tax:

- 1) the rate;
- 2) the procedure for payment of the tax;
- 3) the bases for differentiation as a function of the location of the land, and in the case of farmland, as a function of assessment of the soil quality.

7. The Customs Levy

Article 28. The customs levy is paid at the established rates of the levy by juridical and private persons on the value or volume of goods belonging to them that pass through customs.

Article 29. The customs levy is paid into the State Budget.

Article 30. The Law on Customs establishes the following concerning the customs levy:

- 1) the rates;
- 2) the procedure for payment of the levy.

8. The Conveyance Tax

Article 31. The conveyance tax is paid by juridical and private persons who own conveyances (automobiles, motorcycles, motorboats, yachts, airplanes, and so on) at the tax rates established per unit capacity of the engine or on the basis of tonnage.

Article 32. The conveyance tax is paid into the budget of local self-government.

Article 33. The Law on the Conveyance Tax establishes the following with respect to the conveyance tax:

- 1) the rate;
- 2) the procedure for payment of the tax.

9. The Investment Tax

Article 34. The investment tax is paid at the established rates by enterprises which are the clients for construction of projects for production purposes being built on the territory of Estonian SSR, regardless of the size of capital investments.

Article 35. The investment tax is paid as follows:

- 1) into the State Budget at the republic rate;
- 2) into the budget of local self-government at the local rate.

Article 36. The Government of Estonian SSR establishes the following with respect to the investment tax:

- 1) the republic tax rate;
- 2) the maximum rate of the additional investment tax established by local self-government authorities;
- 3) payment procedure.

10. The Capital Tax

Article 37. The capital tax is paid [original reads "established"] at the established rates by juridical persons on the value of fixed and working capital.

Article 38. The capital tax is paid as follows:

- 1) into the State Budget at the republic rate;
- 2) into the budget of local self-government at the local rate.

Article 39. The Government of Estonian SSR establishes the following with respect to the capital tax:

- 1) the republic tax rate;
- 2) the maximum rate of the additional capital tax established by local self-government authorities;
- 3) the payment procedure.

Article 40. Juridical persons are exempted from payment of the capital tax if they are financed from the following sources:

- 1) from the State Budget;
- 2) from the budget of local self-government;
- 3) from a state self-purpose fund.

11. The Personal Income Tax

Article 41. The personal income tax is paid by private individuals residing permanently in Estonian SSR on income which they receive as follows:

- 1) on the territory of Estonian SSR;
- 2) in other union republics;
- 3) abroad.

Private persons who do not reside permanently in Estonian SSR pay the income tax on income received from juridical persons of Estonian SSR and other employers of Estonian SSR.

Article 42. The personal income tax is paid into the budget of local self-government.

Article 43. The Law on the Personal Income Tax establishes the following:

- 1) the progressive rates of the tax;
- 2) the procedure for payment of the tax;
- 3) the minimum not subject to the tax.

Article 44. The personal income tax is credited to the budget of local self-government by juridical persons and other employers making payments to private persons and it is also paid by self-employed private individuals (unless they pay the established charge for an operating license), or by private individuals who have other taxable income.

12. The Charge for License To Operate

Article 45. The charge for license to operate is paid at the established rates by juridical persons and individuals for the right to engage in certain forms of activity.

Article 46. The charge for license to operate is paid into the budget of local self-government.

Article 47. The Law on Payment for License To Operate establishes the procedure for its payment.

The rates of the payment for license to operate are established by local self-government authorities.

13. The Pollution Tax

Article 48. The pollution tax is paid at the established rate by juridical and private persons polluting the environment as a function of the degree, volume, character, and duration of the pollution and the extent of its impact.

Article 49. The pollution tax is paid into the off-budget State Environmental Protection Fund.

Article 50. The Government of Estonian SSR establishes the following:

- 1) the rates of the pollution tax;
- 2) the payment procedure.

14. The Entertainment Tax

Article 51. The body of local self-government may establish an entertainment tax which is paid at the established rates by juridical and private persons who organize [original reads "organizations"] in the administrative jurisdiction of local self-government performances and paid public events on the income which they realize from those performances and events.

Article 52. The entertainment tax is paid into the budget of local self-government.

Article 53. The body of local self-government establishes the following with respect to the entertainment tax:

- 1) the rate;
- 2) the payment procedure.

15. The State Administrative Fee

Article 54. The state administrative fee is paid at the established rates by juridical and private persons for the performance of legal transactions and the issuance of documents.

Article 55. The state administrative fee is paid into the budget of local self-government.

Article 56. The Law on the State Administrative Fee establishes the procedure of its payment.

The rates of the state administrative fee are established by the Government of Estonian SSR.

Title III. Tax Inspection

Article 57. Observance of this law is monitored by the following within the limits of their respective jurisdiction:

- 1) the ESSR Ministry of Finance;
- 2) the financial agency of local self-government;
- 3) the Estonian Tax Department;
- 4) other inspectorates within the limits of their respective activity.

Article 58. The ESSR Ministry of Finance and the financial agencies of local self-government exercise general oversight over the collection of taxes.

The Estonian Tax Department monitors the correctness and promptness of payment of taxes by all taxpayers.

Article 59. In order to correct violations related to the payment of taxes, the Estonian Tax Department issues an order to be carried out within the period of time specified by the Estonian Tax Department.

An order of the Estonian Tax Department may be contested only in judicial proceedings, which does not stay execution of the order.

Title IV. Accountability for Violation of the Law on Taxation

Article 60. The following are violations of the Law on Taxation:

- 1) concealment by a juridical or private person of things of his which are taxable or understatement of figures for purposes of taxation, and also late filing of data for determination of the size of the tax;
- 2) failure to meet the established deadlines for payment of taxes;
- 3) refusal to file documents for the purpose of verification and other activity to obstruct inspectors;
- 4) use of incorrect tax rates.

Article 61. The following types of accountability are established for violation of the Law on Taxation:

- 1) criminal accountability;
- 2) administrative accountability;
- 3) disciplinary accountability;
- 4) financial liability.

Article 62. Managers of juridical persons and their respective subdivisions who are responsible for prompt declaration and recording of those things which are subject to taxes and administrative fees, for observance of deadlines for payment of taxes, and for prompt filing of the established tax documents are subject to criminal or disciplinary responsibility for violation of this law.

Violation of the Law on Taxation entails increased financial liability of juridical and private persons.

Article 63. Private persons are subject to administrative accountability and financial liability for violation of this law.

Article 64. A penalty in the amount of 0.5 percent of the underpayment is collected for each day of delinquency from a taxpayer for late payment of taxes.

Article 65. For tax evasion or understatement of tax (with the exception of the corporate income tax), the Estonian Tax Department collects these taxes from juridical persons in a threefold amount on a peremptory basis.

The statute of limitations does not apply to the collection of these payments.

Article 66. In case of concealment or understatement of income by juridical persons resulting in an underpayment of the corporate income tax, the Estonian Tax Department collects as a budget revenue threefold the amount of tax concealed or underpaid.

The statute of limitations does not apply to the collection of these amounts.

Article 67. In case of evasion of the payment of taxes, concealment or understatement of taxable items by private persons, resulting in underpayment of tax, the Estonian Tax Department collects threefold the amount of the unpaid tax through judicial proceedings.

Unpaid back taxes are collected for a period not to exceed the last 3 years.

Article 68. Overpayments of tax are returned to private persons for a period not exceeding the last 3 years and to juridical persons for a period not exceeding the last calendar year.

Imports, Exports Draft Law

904A0124B Tallinn SOVETSKAYA ESTONIYA in
Russian 14 Dec 89 p 2

[Draft Law adopted by the ESSR Supreme Soviet in Tallinn on 6 December 1989: "On Regulating Imports and Exports of Goods"]

[Text]

1. This Law regulates the importation of goods (agricultural products, consumer goods, products for production and technical purposes, and miscellaneous work items and services) into Estonian SSR from other union republics or foreign countries, and also exportation of the same to other union republics or foreign countries by enterprises, institutions, and organizations (hereinafter "enterprises") and by private persons.

2. Goods imported into Estonian SSR and exported from Estonian SSR are subject to registration as established by the Government of Estonian SSR.

3. The enterprise or private person submitting information in order to register the importation or exportation of goods is accountable for the authenticity of that information.

4. For failure to register goods imported or exported, the enterprise or individual pays into the State Budget of Estonian SSR a fine in the amount of 5 percent of the value of goods not registered, but not less than 100 rubles for each lot of goods.

5. In order to ensure the economic stability of Estonian SSR, the conservation of natural resources, and protection of the interests of producers and consumers, the importation and exportation of certain goods are subject to state regulation by means of quotas and licenses.

6. For the purpose of this law, "quota" means a volume restriction of imports and exports in physical, conventional physical, or value units of measurement.

The procedure for instituting, amending, and abolishing the quota is established by the Government of Estonian SSR.

7. For the purpose of this law, "license" means a permit to import or export particular goods.

Goods on which a quota has been established are imported and exported on the basis of licenses. Licenses may also be issued by the Government of Estonian SSR in order to execute trade agreements concluded in its name.

8. Any enterprise or private person who pays the administrative fee according to the procedure and in the amounts established by the Government of Estonian SSR may apply for issuance of licenses.

Enterprises and private individuals duly issued licenses have an exclusive right to use them.

9. Licenses are issued as a rule for payment, and revenues from their issuance are credited to the State Budget of Estonian SSR.

The procedure for the issuance, amendment, and revoking of licenses is established by the Government of Estonian SSR.

10. For importing or exporting without a license goods subject to licensing or for doing so in an amount exceeding the amount envisaged in the license, enterprises or private individuals, on the initiative of the body issuing the license, pay into the State Budget of Estonian SSR threefold the value of the goods imported or exported without a license, and reimburse damage incurred.

If licenses issued to enterprises or private individuals are amended or revoked in the interest of the state, the damage incurred by them is reimbursed out of the State Budget of Estonian SSR.

Commentary on Trade Law

904A0124C Tallinn SOVETSKAYA ESTONIYA in
Russian 15 Dec 89 p 1

[Article by Lembit Viylup, laboratory head of the Institute for Economic Development of Estonia]

[Text] The ESSR Supreme Soviet has taken up on first reading the draft of the ESSR Law on Regulation of Imports and Exports of Commodities. Lembit Viylup, laboratory head of the Institute for Economic Development of Estonia, tells about the goals which the bill pursues.

At a time when the country's economy is characterized by a general imbalance between demand and supply, and when there is an ever larger shortage of goods, when the ruble is no longer able to fully perform its functions, yet there are no economic and political borders between the republics, it is indispensable to achieve satisfaction of the needs of the republic's internal market, above all for products which are traditional for Estonia. In this way, we will be able to convince the population of the effectiveness of our effort and also of the possibility of constructive shifts in the economy.

With this in mind, the draft law envisages as a temporary measure the establishment of quotas restricting the exportation from the republic of goods in short supply on our domestic market and the adoption along with the economic regulators now in effect (taxes, for example) of a system of licensing, i.e., import and export permits in accordance with the established quotas (amounts).

The bill envisages import and export quotas. The question might arise: Why do we restrict imports; after all, at the present time there is a shortage of virtually all goods on the internal republic market? In answering that, I will say that the bill must examine the problem more broadly, it is not designed just for today. Import quotas exist in all the advanced countries. The United States,

for example, restricts imports of Japanese automobiles; import (and export) quotas have been established among the West European countries on foodstuffs and other goods. And so on.

And indeed even in our own country. I remember one fall when our market was overloaded with cheap cabbage from Azerbaijan and our Estonian cabbage, which was just as good in quality, but was somewhat more expensive, rotted in the warehouses at that time.

Flexible regulation of imports as a function of the needs of our own market will help to avoid collisions of that kind.

Export quotas, one can easily understand, are established to protect the domestic market against the outflow of scarce products which could be harmful to the interests of the consumer of Estonian SSR. Export quotas will also apply to natural resources if this results in an excessive load on the environmental situation or results in an inadvisably rapid depletion of those resources.

At the same time, no export quotas will, of course, be established on products for which there is no demand on the domestic market. The "Dvigatel" Plant, for example, will be freely exporting its main product in the future just as it has in the past.

At the same time, the establishment of quotas must create those proportions between supply and demand on the domestic market that will help to develop competition and boost production. There is no question that the law will fully take effect when the republic has its own currency.

Simultaneously with the draft law, it is being proposed that a decree of the Estonian Council of Ministers be adopted to regulate procedure for registration of imports and exports of commodities and the establishment (issuance), amendment, and revoking of quotas and licenses

The decree will require every enterprise, institution, and organization shipping goods out of Estonian SSR or importing them into Estonian SSR to keep accurate records of imports and exports. A license department is being created to monitor observance of import and export procedure regulated by licenses.

Import and export quotas are established on application of interested enterprises or organizations concerning goods on a list established by the Government of Estonian SSR.

Quotas, of course, cannot be established for all products. But the republic intends to export only those goods and only in those amounts which guarantee equivalent exchange of products between regions (republics) of the country. For example, the "Estar" concern in light industry receives a sizable portion of its raw materials from other republics. Finished products of "Estar" must be exported for that amount from Estonia.

Quotas and licenses are also established in foreign trade operations.

Otsason on Achievement of Baltic Economic Independence

904A0096A Tallinn SOVETSKAYA ESTONIYA in Russian 1 Dec 89 pp 2-3

[Article by R. Otsason, USSR people's deputy, doctor of economic sciences: "What We Achieved on 27 November"]

[Text] At 1719 hours Moscow time on 27 November 1989, a total of 296 out of the 400 members of the USSR Supreme Soviet simultaneously pressed their voting buttons in order to say: we are in favor of economic independence for Lithuania, Latvia, and Estonia. A total of 67 deputies voted against it, and 37 were unable to make up their minds. This was the finale of a long struggle. The first milestone was the 18 May meeting of the republic Supreme Soviet, when the Estonian SSR law "On the Bases of Cost Accounting for the Estonian SSR" was passed. There followed complicated attempts to include the question on the agenda of the 1st Congress of USSR Deputies, which culminated in the decision by M. Gorbachev to submit the question for consideration by the 1st session of the USSR Supreme Soviet. This was done, but it was not possible to conduct a final discussion, and it was therefore limited to the Supreme Soviet resolution adopted on 27 July, although it did open up the possibility for making preparations for switching the republic to cost accounting, but it did not have the force of law. And this was followed through from 27 July to 27 November.

But during those months the situation changed significantly. Throughout the Soviet Union the struggle between perestroika and conservative forces grew increasingly fierce. The question of economic independence for our three republics became one of the battlefields in this struggle. For conservative forces our aspirations were so dangerous that all possible kinds of means were brought into play in order to prevent a law from being passed. The statements issued by our Interdvizheniye people and the pamphlets circulated in the hall of the Supreme Soviet were only part of this. But the issue became increasingly one of principle. The struggle against the draft law for the Baltic states was regarded both in the USSR and abroad as a struggle against the Gorbachev line of perestroika. And for this reason, resolution of this issue and helping or hindering it became an issue on which international public opinion on the possibility of success for our course of perestroika, and the personal authority of its leader M. Gorbachev largely depended. The stakes were raised and the struggle intensified. Now, when a decision has been made, it is time to consider what we gained and what we lost

What Did We Gain in World Politics?

When I was in the United States in early November, at every step I was convinced that the world public links the desire of Estonia for independence and the development

of Estonia with all of world politics. The positive assessment of our consistent parliamentary struggle was all the time accompanied by the fear that we might harm the priority, positive processes in world politics. By this was implied first and foremost that we should not create a threat to the political line of M. Gorbachev aimed at renewal of the Soviet Union's domestic and international policies. This criterion is of primary importance for the entire world. And this we must recognize and take into account as one of the realities on which we also depend. If it is asserted that our policy can threaten the processes of relaxation of tension in the world, then people would immediately reject us.

In this sense we won a very great deal on 27 November. The whole world saw that we had again tried to achieve victory by parliamentary means, and that we had achieved it. The world saw that we had waged that struggle along with the supporters of M. Gorbachev against conservative forces. For us, this was the first positive result.

The second was that our latest success is strengthening trust in the course of political development in our republic, and this in turn strengthens confidence on the part of economic leaders and businessmen in the West, which is so essential for their further active involvement in the process of development of our economy.

But I suggest that M. Gorbachev, who is soon to meet with President Bush, won just as much. Postponement of the "Baltic question," or even worse, its failure, would have significantly lowered confidence in the prospects for perestroika in the Soviet Union, and, it must be owned, the prospects for M. Gorbachev himself. And this, in turn, would have complicated the Soviet Union's foreign policy and the development of its foreign economic relations. So we have won, and the policy of perestroika in the Soviet Union has won.

What Did We Gain in the Soviet Union?

The decision reached in 27 November signified a great political victory for our republic and the entire Baltic region at the level of the Soviet Union. We all remember the actions that were undertaken starting from the summer in order to destabilize the situation in the Baltics and to change the opinion of our people, who were prisoners of the central mass media. I would recall the wave of strikes in which the active leadership was played with the involvement of Interdvizheniye, the campaign of misinformation from the central press, and some of the resolutions adopted in the name of the highest organ. As a result of all this it was possible to evoke in people in the Soviet Union mistrust of the policy of the Baltic republics. We have now all been convinced of this in the USSR Supreme Soviet.

The main issue now is whether this campaign produced such results as now to enable development of the processes of perestroika in the Baltic, which largely paved the way for perestroika throughout the Soviet Union, or whether the conservative wing will be able to halt them

through the USSR Supreme Soviet. These were the stakes in and the motive for the struggle. The fact that we have achieved victory means that it has been confirmed for the populations of all the republics in the Soviet Union at the highest legislative level that the course taken by the Baltic region is correct and that the overwhelming majority of deputies support it. This is an event of enormous political significance.

Economic consequences that are favorable for us stem from this decision. It is now much more difficult to pursue that policy of discrimination that some particular representatives of a high department in the economy field have from time to time tried to pursue with respect to our republic by limiting resources, funding, and credit for us. The position of our republic in the struggle against such phenomena, or against distortions, is now much firmer.

But I would assess even more highly the importance of this decision for implementing many of the perestroika processes in our federative system of the Soviet Union. Adoption of this decision has meant the first real step toward changing federative relations in the direction that we also consider the correct one, including the direction of drawing up a new Union treaty. As we saw, it was because of this that a major attempt was made to oppose this legislation and show that all the republics should switch to a new system in an identical manner, and that when this were done it would necessarily be essential to preserve the existing principles of the unitary state and the constitution of a unitary state.

There is more. That part of the program for our cost accounting, according to which enterprises must be given freedom and independence, giving due consideration to the market economy, is very important for the entire democratic movement in the Soviet Union. As is that important part of our concept according to which all small regions (cities, rayons, volosts) are granted independence in organizing the economy and the social sphere. If we succeed in realizing them in our republic, all these principles will serve as an example to others and hasten the entire process of democratization so essential for the Soviet Union.

There is one typical and interesting example from the Supreme Soviet session. When it started to become clear that the decision on the Baltic region would be adopted, one extremely frightened deputy from Belorussia (as is known, Belorussia recently switched to the so-called Maslyukov variant) rose and asked if the other republics would now be able to switch to the Baltic variant. It goes without saying that we see no obstacles to this and deem it advisable that all the republics do it as soon as possible, perhaps also including the entire Russian Soviet Federative Socialist Republic. And the processes that will take place in neighboring republics will exert a direct and positive effect on us: the more democracy there is in the USSR, the more confident we also shall feel.

What Is Estonia Gaining?

Let me say immediately that we have not gained a paradise. We must work as before. But we now have more favorable conditions for the stepped-up work necessary to achieve economic independence. The new law opens up for us the kind of legal prerequisites for progress in management of the economy that we have not heretofore had. I would like to draw attention to two factors of the utmost importance.

First, Article 6 of the law states that economic relations in Estonia are now regulated not only by the republic Constitution and the laws of the USSR but also by the Estonian SSR law "On the Bases of Cost Accounting in the Estonian SSR." This means that our law—the law of the Estonian SSR—has been elevated to a higher level than the laws of the USSR. Its implementation, binding on us on the basis of USSR law, also makes it binding on all USSR departments. Taking into account all the disputes that particular articles of this law have caused, this kind of "elevation in rank" is of great practical importance, and even greater political importance.

The second fundamental decision of that same Article 6 reads as follows: "... legislative enactments of the USSR regulating economic relations operate on the territories of the aforementioned republics insofar as they do not hamper their transfer to economic independence." We recall that the principle established here was also contained in the 27 July resolution. Now, however, it has been elevated from the rank of a resolution to that of a law. Many jurists from the institutions in Moscow were afraid of this paragraph and at the Supreme Soviet session they demanded that it be removed, but the Supreme Soviet stood firm on this viewpoint. In practical terms it signifies the priority of the Estonia law "On the Bases of Cost Accounting in the Estonian SSR" over USSR legislative enactments. At the same time, the resolution also contained the demand that as we pursue policy in the management of the economy we are obligated to do this within the framework of the USSR Constitution. This means that we must adhere strictly to USSR laws and comply with them—for such was the wish of the legislators—but in cases in which a particular legislative enactment is at variance with the demands of the introduction of cost accounting in Estonia, bearing in mind the complexity of management and the integrity of the economic mechanism, should proceed on the basis of the latter. And this is also a requirement of the new USSR law.

These two fundamental provisions are in fact of decisive significance for introducing the cost-accounting program in any sector. However, we should also be reminded of another series of positive factors in this law.

The management of the republic's financial system and the republic banks (with the exception of the institutions of the USSR Gosbank) has been transferred to the competence of the republic. There are only two lines on this, but there is much that is new in them. First, it has

been clearly stated that management of the republic's budgetary system and budget incomes and expenditures fall within the competence of the republic. Second, it is stated that management of all republic banks falls within the rights of the republic. It follows from this that all established republic branches of all-union banks now operating here, including the Savings Bank and the Vneshekonmbank, now fall within republic subordination. This is also a quite new factor in the management system in the republics, which up to now the central all-union banks have been opposing in every possible way. Since management of the banks now falls within the competence of the republic, the right to manage credit policy in the republic through these banks follows logically. This is also a significant innovation that was not envisaged either in the draft drawn up by the central all-union banks, or in the so-called "Maslyukov draft" and its Belorussian variant.

And now the question of money. Despite the passionate appeals from some deputies to include in the draft legislation a paragraph that would prohibit the all-union republics from issuing their own money, that point was not included in the law. True, one authoritative speaker did reckon that we objectively have no opportunity to do this since we have no gold and no foreign state would accept our money in the settlement of accounts. This is true. At least initially. However, we have never thought to introduce our own legal tender possessing immediately all the functions of money. It is a question primarily of certain basic functions of money that are of great importance for republic cost accounting (money as a means of payment and as a scale of values). In this sense the law does not prevent the introduction of our own legal tender (our own money). But we should consider thoroughly all the criticisms that were made during the course of the discussions in the USSR Supreme Soviet. It is a serious matter, and any substantial, planned measures should also be serious.

The right of republic organs to establish a pricing system on republic territory has been clearly formulated. This is also a quite new and fundamental provision that is fully in line with the corresponding republic cost-accounting program. Its introduction will insure for us the most rapid and most consistent utilization of the demands of a market economy. This, of course, does not mean that when this is done we should not pay attention to the formation of real incomes by the public and the need to regulate prices so that it does not cause social contradictions.

The question of ownership of natural resources has also been resolved in a unique and in principle acceptable way for us. Each sober-thinking deputy, of course, understood that it is advisable to include in this law a paragraph concerning what was still the subject of fierce dispute when the USSR law on ownership was being drawn up. It would put a stop to the endless disputes about an issue that one way or another requires a special approach and special decisions. But the Supreme Soviet commissions agreed that we include in the draft law a

paragraph that essentially amounts to recognition of republic ownership. The sense of it is as follows: the possession, use, and disposition of land and other natural resources on our own territory relates to the highest republic organs of state power, in the interests of the republic and the Soviet Union. It goes on to state that the disposition of the state fund of natural resources, the establishment of maximum limits, normativs and legal standards for the use of natural resources, and also any associated issuance of permission and imposition of bans regarding the activity of enterprises, organizations, and farms, should fall within the competence of the republic. In this way, at the present stage our practical interests are adequately protected, while at the same time disputes about precise formulations in the Law on Ownership can be continued.

The fact that Article 2 of the law fixes the principle of the independence of republic enterprises, institutions, organizations, and farms should also be considered important. It is common knowledge that frequent attempts have been made to torpedo our cost-accounting program by the false assertion that instead of the present Law on the Enterprise we were trying to impose on enterprises some kind of new form of "serfdom." The principle established by the law (the extradepartmental status of enterprises) is in fact unprecedented for the Soviet Union, and it should be useful for all our enterprises, at least those who want to manage themselves independently and that do not fear the difficulties of independent management. It is also stated that no matter what economic associations enterprises may be part of, they are obligated to comply with republic laws. And these latter stem from the interests of all the republic's inhabitants.

One very progressive idea is that the creation of a financial market and the attraction of assets to it both from other republics and from foreign states on a mutually profitable basis may fall within the competence of the republic. We interpret this paragraph as the republic's right to set up an exchange and to organize the selling and buying of stock, including the participation of foreign states.

But the law has not only positive aspects. My personal opinion is that in today's legal and political situation in the Soviet Union a law can be adequately implemented if it also contains contradictions and is not completely accurate in certain matters. The attentive readers will in fact also find contradictions in the law. I would say that a person with at least two law degrees (or at the very least a decent degree in economics) would understand the entire text of this law best and most correctly. But joking aside, we should answer this question.

What Did We Fail To Achieve?

First, we were unable to achieve certain points of legal clarity to eliminate any disputes between our republic and central institutions. I have already noted the reason for that. But the two provisions contained in Article 6 do

place in our hands a means that enables us to defend and substantiate all the innovations made in accordance with the cost-accounting program. This is major.

The fact that relations between the republic budget and the USSR budget have not been precisely regulated, one might even say not regulated at all, must be considered negative. In this matter, and it is in reality the key issue of cost accounting, we depend on what is stated in the law, namely, "on USSR legislation." And that is established each year by the budget decrees of the USSR Supreme Soviet.

Those decrees may be fair for us and establish our deductions to the all-union budget in such a way that they will be in line with the minimum necessary spending to carry out the overall functions of the USSR and leave for the republic all income derived from our better work. But they might also be such that each year on the basis of a subjective decision the additional income provided from better organization of production and life will be taken from the republic. In this event this would be nothing more nor less than an all-union tax.

And I would like to say that we do have an example of this. It is the republic budget for 1990, according to which, as is common knowledge, the main part of increased revenue for the republic is being allocated to the USSR budget in the form of an all-union tax while only a small part is going to the republic budget. If, for example, all republic budget revenue grows 11.6 percent, then only 1 percent will remain at the republic's disposal to cover additional costs. The main part is being transferred to the all-union budget in the form of an all-union tax that is double the tax for 1989. This should no longer be repeated.

However, despite the fierce struggle we have been unable to safeguard the correct position in matters of budget relations, and it would be inadvisable to reject the law in its entirety for that reason alone. The struggle in this matter will continue.

Another important matter in relations between the republic and the USSR has not been regulated. This is the question of who determines interrepublic exchange: the republics themselves on the basis of voluntary agreements concluded between them, or the USSR State Planning Committee (Gosplan), as previously. This has been left as before. This again means that the USSR Gosplan has in practice the opportunity to take from the republic in accordance with state obligations more from the sale of output than would be in the interests of the republic, or even to allocate less funding than is needed to develop the republic. Unfortunately, this means preservation of the old administrative-command system in this important matter. If in the future the USSR Gosplan is able to continue its previous practice of "planning," then we shall gain nothing from real cost accounting. I would, however, like to hope that the efforts of democratic forces in the USSR aimed at improving the economic mechanism, eliminating the command

economy, and extending the rights of the republics will soon lead to changes such that the USSR Gosplan will be unable to behave in the old way. This is why we have proceeded from the precondition that this point may be accepted in its present form, but the struggle to apply it in accordance with our interests must be continued.

Unfortunately, a third matter in relations between the republic and the USSR is also imprecise, namely, the question of transferring enterprises of all-union subordination to the republic. The provision in the law states that these matters will be resolved according to agreement reached between the USSR government and the republic government. It is common knowledge that agreement is a concept that cannot be reached if one side does not want it to be reached. And so here we have been unable to offer any additional assistance to the Estonian SSR Gosplan in carrying out its very difficult activity in altering the status of the so-called all-union enterprises.

The rights of the republic in regulating foreign economic activity have also been inadequately formulated. True the idea has been fixed that management of the republic's foreign economic activity shall be carried out by the republic, and here it is necessary to observe the standards agreed between the republics and the USSR. Unfortunately, there also remains only a vague concept of republic foreign economic activity. Nothing is said about switching the republic to hard currency self-supporting production (*samookupayemost*), or about the right of the republic to make independent use of its hard currency. On the other hand, these principles are clearly formulated in the Estonian SSR law on the bases of cost accounting. This means that even on these issues, which are of extraordinary importance for us, we face disputes in which we shall rely on the provisions contained in Article 6 of the law.

To sum up, I would say that politically this law is extraordinarily important and positive for us. Economically it has opened up for us many new doors to more rapid progress along the road to the introduction of cost accounting. With respect to the cost-accounting program overall, as before we face a fierce struggle regarding many of its sections, but now in somewhat better conditions than when an all-union legislator approved our cost-accounting program, and willy-nilly the USSR central organs will be forced to recognize our economic independence.

And so, there is work enough, but I am confident that we will also have strength enough for it.

Estonia's Economic Growth Examined

18150117 Tallinn RAHVA HAAL in Estonian
21 Oct 89 p 1

[Article by K. Pollisinski: "Ruble Comes, Ruble Goes. But Where?"]

[Text] It is hoped that contractual agreements between enterprises and profitability will emerge as key considerations in the evaluation of economic activity within the IME [Self-Managing Estonia] system that is to take

effect with the coming year. So, by way of introduction, let's take a look at how some of these items were doing at the end of the third quarter. And, not wishing to burden my esteemed readers, I have made selective use of the report issued by the Statistics Committee.

Contractual obligations within the industry were met by 99.4 percent (99.6 percent for the nine months of 1988). For enterprises reporting directly to the Central authority this percentage was 98.1, for Union-republic or state-run industry this figure was 99.8, and for the Centrally-controlled metals industry 98.

When it comes to meeting profit objectives, the picture is a little brighter. The industry located within the territory of Estonia met its eight-month profit objectives by 114.1 percent, out of which the Centrally-controlled enterprises and organizations showed 111.6 percent, and the Union-republic and state-run industries 115.5 percent.

An attentive reader may detect a little contradiction here, but that goes back to the same old issue of pricing, that has been shrouded in silence for a good number of years.

Over the eight-month period, the Estonian state budget shows proceeds in the amount of one billion and 409 million rubles (69.2 percent of the total projected for the year). Out of that amount, one billion and 343.3 million rubles (63.1 percent) have been spent so far.

Concerns about the state purse are not different from those we have about our own. We are still asking how much money came in, and how much has been (or could be) spent? Some kind of generalized answer could be obtained from the latest economic outlook report issued by the institute of economic research.

According to the ER [Estonian Republic] Bank division of the USSR State Bank, cash disbursements from the bank went up by 123.4 million rubles or 8 percent. For the last year, this increase was 99.7 million rubles or 6.9 percent. Salaries of workers and service personnel have increased by 80.7 million rubles (6.9 percent), and those of kolkhose workers by 31.9 million rubles (17.1 percent). For sales of agricultural products to the state the "flower-pot" farmers received 3.3 million rubles more than they did for eight months of last year, pension funds disbursed out of the state bank have increased by 3.5 million rubles. Cash disbursements attributed to cooperatives were up 105.2 million rubles (or 4.9 times) from last year. So much for the money reaching our pockets.

There are also other sources for the money that is busy seeking its way to the marketplace. It has become obvious that we are no longer eager to put our money into savings, even though the familiar signs "Keep your money in a savings bank" are still around to annoy the passers-by. For the eight-month period of last year, total savings grew by 84.1 million rubles (4.5 percent), for this year the increase was 77.3 million rubles (3.8 percent). As of September 1, we had 2 billion and 197.7 million rubles deposited in savings.

How much is all that money worth? Not much. In 1960, each ruble of money amassed in the USSR was backed by 1.42 ruble's worth of merchandise. Today the same backing amounts to only 18 kopeks per ruble, almost 7.9 times less.

The money masses dumped on the market or increased buying power, as the market researchers call it, on one hand, and the decline in the growth rate of the trade volume (from 1988's 17.1 percent to 1989's 10.8 percent), on the other, show what we can see in our stores every day—the counters are getting emptier all the time. This creates tensions in the marketplace that occasionally escalate into buying panics. It should be mentioned here that, on the average, the trade volume in the USSR grew this year from 9.3 to 9.7 percent. Suffering from a slackening of the trade volume are Lithuania, Latvia, Turkmenistan and Kirgizia. An expanding trade volume, however, has been achieved in Georgia, Armenia, Azerbaijan and Tajikistan. This comparison calls for a separate analysis that is unfortunately not possible right now.

Among the causes for local market tensions the researchers name a dropping growth rate in the production of consumer goods in Estonia, a chronic shortage of

commercial resources and the resulting drop in selections, expanding buying activity, particularly the growing list of merchandise in short supply, the unwarranted rise in the average price, the ever-shrinking inventories, and the mounting conflict between the price and user-value of available goods and services.

Monetarily, the greatest growth occurred in sales of agricultural products at negotiated prices—15.8 percent (from 9.8 percent for the same eight months of last year)—and commission sales of manufactured goods (Tallin's Industrial Trading office 36.9 percent).

A drop in the budgeted inventories indicates that a full selection can no longer be delivered to each of the outlets. One has to settle for what is available at the time. Selection gaps add up to local shortages that have a way of becoming general shortages. Merchants calculate their budgeted inventories in selling days. Even two or three years ago it was said that store inventories had dropped below the normative limits. Now, we have to admit that the 55-day inventory of goods has been reduced to 50 days.

A market survey was conducted in May to find out how the shortages of different goods or services interfere with the lives of people? Results are shown in the table (percentage of those sampled):

	Interferes much		Interferes a little		Does not interfere	
	town	country	town	country	town	country
Manufactured goods	63	58	33	38	4	4
Food items	72	63	25	28	3	9
Living space	37	22	23	27	40	51
Service	25	21	53	61	22	19
Medical Assistance	30	28	45	44	23	28

It is clear, at a glance, that it is the lack of goods that disturbs people the most. A closer study of this phenomenon also

reveals how this situation is accepted by families with different incomes:

Commodity Group	Average income per family member	Interferes much	Interferes little	Does not interfere
Food items	up to 50 rbls.	90	—	10
	51 to 100 rbls.	61	36	3
	101 to 200 rbls.	61	35	4
	over 201 rbls.	61	37	2
Manufactured goods	up to 50 rbls.	80	20	—
	51 to 100 rbls.	75	23	2
	101 to 200 rbls.	66	28	6
	over 201 rbls.	69	25	6

Now, to some quick conclusions drawn from the tabulated data. At least three fifths of those sampled were deeply disturbed by the situation that has befallen them. The responses of families with the smallest incomes were very specific. Judging by the satisfaction ratings, it seems that the widening gap in the market of manufactured

goods is causing the most concern. The same trend also holds true for all other income groups.

The shortage of food items is general to all groupings, as families with 51- as well as 201-ruble incomes (per family member) are dissatisfied equally. The causes of

dissatisfaction for families of such divergent means are obviously different. This points to the lack of choices on both the price and the quality scales as one of the obvious problems compounded, in turn, by a distorted ratio between the two.

A cause of even greater dissatisfaction with the condition of the manufactured goods market is the progressive paucity of that particular market segment, and the fact that, in the eyes of the consumer, the relationship between the price and user-value of the items is even more out of kilter than it is for the food items market.

Now, let's touch on one of the key issues of the day. The last "special currency" was introduced in the form of

coupons for buying soap and detergents. How many tons of those were sold during the first half of the year? Let's look at one more table.

	1988	1989	Percent of growth
Household soap	577	768	133.1
Toiletry soap	700	842	120.3
Synthetic detergents	—	2,853	—

Sketchy as they may be, these data do signify something.

And, finally, I cannot resist the temptation to offer the reader one more table that shows the rise in the prices of some household and recreational equipment:

	Average price, rubles, 1970	Average price, rubles, 1980	Average price, rubles, 1988	Price increase (times) between 1970 and 1988
Radios	82	111	153	1.86
Television sets	383	359	559	1.46
Tape recorders	175	227	288	1.65
Refrigerators	200	300	290	1.45
Washing machines	100	110	110	1.1
Vacuum cleaners	40	50	51	1.27
Automobiles	3,984	7,274	8,456	2.14
Bicycles	53	59	76	1.43
Sewing machines	75	140	168	2.24

The question is bound to arise, right away, where could one buy these items, even at those prices. That I couldn't tell you. But you can take note of the prices anyway. Of course, there will be other bits of interesting information that will surface as part of the market research activity. We'll try to publish there in due course, as soon as results are known for the whole year.

RSFSR Finance Minister Projects R6.3 Billion Deficit in 1990

904A0088A Moscow *SOVETSKAYA ROSSIYA* in Russian 29 Nov 89 p 3

[Speech by Deputy A.A. Bobrovnikov, RSFSR Finance Minister: "On the Draft RSFSR State Budget for 1990 and the Implementation of the RSFSR State Budget for 1988"]

[Text] Respected comrade deputies, the RSFSR Council of Ministers presents for your approval the draft of the state budget of the Russian Federation for 1990 and the report on the implementation of the state budget of the republic for 1988.

The transition to mainly economic management methods increases the role of the state budget as a very important tool for implementing economic and social policy and solving the problem of financial stabilization.

When the budget was drafted, the current state of the economy, finances and money supply, as well as the goal of normalizing them, were taken into account.

The RSFSR Council of Ministers drafted a set of urgent, priority measures for 1989-90 to improve the financial health of the economy and overcome budget deficit and money supply problems.

However, due to the declining rate of economic growth in the second half of this year, lower discipline, disruptions in transport, unexpected expenditures due to strikes and other negative economic and social factors, we cannot yet speak of cardinal changes. The RSFSR Gosagroprom, the RSFSR Ministry of Light Industry, the RSFSR Ministry of the Textile Industry, the RSFSR Ministry of Housing and Civilian Construction and a number of other ministries failed to implement measures to improve the financial health of the economy passed by the government. Republic revenues fell R486 million short of plan due to lower profits. In light of this, the RSFSR Council of Ministers passed a resolution spelling out additional steps to tap revenues and cut nonessential outlays.

The ability to execute the RSFSR state budget in the current year and to draft realistic projections for 1990 will depend on how fully and consistently these steps are implemented in all areas of the economy and at all levels of management.

Main Features of the Draft RSFSR State Budget for 1990

The draft RSFSR state budget for 1990 was based on revenues totaling R131.6 billion and outlays of R137.9 billion. Compared to the current year, revenues will rise R10.4 billion, or 8.6 percent.

However, revenues and outlays were not balanced, with a gap of R6.35 billion remaining.

A special feature of the republic's budget is that like the budget of the country as a whole it is divided into current outlays and a development budget.

The current outlays budget funds expenditures which stem from existing norms and levels of social support. It is set at R118 billion, or 85.6 percent of all budget outlays.

The development budget includes expenditures needed to increase production. Some R19.9 billion is budgeted for this, or 14.4 percent of the republic's outlays.

The budget deficit is expected to be made up by additional steps to increase financial resources in economic sectors and their contribution to the budget while the plan is being implemented, by cutting spending using budget resources more efficiently and, if need be, by issuing state and local bonds to be placed with state, cooperative and other public organizations and credit institutions on a voluntary basis.

An extremely important feature of the draft budget for the coming year is further growth in its social orientation, which is ensured by a greater rise in investment into the social sector compared to the increase in overall budget outlays.

The draft 1990 RSFSR budget includes a new approach to the revenue base of budgets of autonomous republics and local budgets as local entities prepare to shift to the principles of autonomy and self-financing.

Strengthening the Revenue Base of the RSFSR State Budget by Raising Economic Efficiency

With the R55.8 billion budgeted for profits (revenues) in 1990, or 113.7 percent of the 1989 plan, the republic's enterprises will retain 70.2 percent of the net increase. This was meant to bolster the financial underpinnings of the economy and to strengthen the principle of economic accountability in distributing and spending profits. The contribution to the budget from profits will amount to R21.3 billion.

The draft plan and budget for the coming year call for a more active use of economic methods to reduce production costs, which is the main factor in raising profits and cutting losses under the conditions of intensification in industry.

The connection between the tax on turnover, one of the most important sources of budget revenues, and economic results is growing.

Revenues from the tax on turnover on the republic's territory should reach R73.0 billion, representing a 10.7 percent increase over the amended plan for 1989. Of this sum, the plan calls for R51.9 billion, or 71.1 percent, to be contributed to the RSFSR state budget.

The cooperative movement continues to grow in the republic.

Within the established legal and economic framework, ispolkoms of local soviets of people's deputies must provide every form of assistance to help develop those aspects of cooperative activity which directly satisfy consumer demand for goods and services and thereby address the same problems as society as a whole.

The draft budget for the coming year expects compulsory and voluntary contributions from individuals to total R15.4 billion, up 22.7 percent compared to the 1989 plan.

The draft plan and budget contain concrete steps to increase the supply of goods for the consumer market. There is another, equally important problem in restoring healthy currency circulation in the republic: a higher pace of consumer income growth compared output growth. In the first nine months of the year, industrial production in the RSFSR rose 1.6 percent compared to the 9.1 percent rise in the average wage of workers and office employees.

In existing conditions, we must tightly close all possibilities for getting unearned income.

Budget Outlays: Greater Social Orientation, Higher Economic Returns

It should be noted that the draft budget pays most attention to the task of funding measures addressing most important aspects in improving the living standard, such as food, housing, consumer goods and services and the social and cultural sectors.

The 1990 budget allocates R54.3 billion, or nearly 40 percent of all outlays, to the agricultural industry complex.

These financial resources will create conditions for raising output in the livestock, farming and processing industries, developing the industrial infrastructure of the agricultural complex and building up the social sector on the countryside.

Counting all sources, R7.9 billion will go to the development of light industry, textiles, the local industry, fuels and building materials in 1990. If resources are used rationally, this will help fulfill the challenging plan for the coming year and improve the availability of the products of these industries.

Keeping in mind the need to allocate financial resources to important social needs on a priority basis, the republic's draft budget for 1990 allots R64.2 billion to social and cultural activities, compared to the R6.2 billion

budgeted for this area by the current year plan when it was passed by the RSFSR Supreme Soviet.

Speaking of priority goals, the budget will effectively solve the issue of improving the social safety net for low-income citizens, notably retirees and the disabled. Without waiting for the new pension law to be passed, the budget will raise minimums for pensions and subsidies and introduce additional benefits for retirees. In 1990, R3.4 billion will be spent on this, counting funds from all sources. Overall, R38.6 billion will be spent in 1990 on pensions and subsidies to workers, office employees and collective farmers, on maintaining homes for the aged and the disabled and on providing services to war and labor veterans, a 15.8 percent increase over this year.

To fund planned measures to improve the health of the people, budgetary outlays on health care will rise sharply. Compared to the amended 1989 plan, they will rise by R1.3 billion in 1990.

Budgetary allocations to public education, higher education and culture will increase considerably. In 1990, expenditures in this area will rise R1.4 billion over the amended plan for this year. In public education, the plan provides full financing for the recently drafted long-term program to repair school buildings and funds computerization of the educational process. Among priority measures is funding for increased nutritional norms at preschool care facilities, for the study of ethnic languages and publication of textbooks and for improving the living conditions and instruction for children in the Far North.

The budget allocates R2.2 billion to higher education institutions in the republic to train well-rounded specialists for the economy, provide education to students discharged early from the USSR armed forces, pay higher salaries to faculty and buy modern computer equipment.

Financial resources allotted to preservation, restoration and maintenance of historical, architectural and cultural monuments which are important for patriotic education of the Soviet people will be increased substantially.

The construction industry has an important part in developing the economy of the republic. The economic complex of the Russian Federation will get R40.2 billion of state capital investment, with R20.0 billion coming from the central government.

New approaches were used to design investment policies, stemming from the requirements of economic reform which is under way in the country. Their self-funding aspects were bolstered, and consequently the share of funds earned by enterprises and industries and long-term bank loans in funding capital investment in industry rose considerably. Overall, the share of direct state financing fell from 80.3 percent in 1989 to 74.1 percent.

As is well-known, four large general construction ministries, whose financial condition is extremely unstable, were

moved to the republic level in the middle of the current year. These and other ministries and agencies must take necessary steps to restore their financial health.

In 1990, a total of R13.3 billion will be budgeted from all sources for the development of transport, highways and communications in the republic, and R9.7 billion for retail trade and consumer services.

Taking the growing need to improve housing and municipal services into account, R13.4 billion will be spent in this sector according to the plan, or 11.7 percent more than budgeted by the 1989 plan.

It should be noted that the Ministry of Consumer Services, the Ministry of Motor Transport, the Ministry of River Fleet, the Ministry of Communications and other ministries do not fully use their considerable reserves to satisfying consumer demand, stabilize money supply and restore the health of the financial system by sharply increasing the output of services, improving their quality and using budgeted funds thriftily. A whole range of problems facing housing and municipal services deserve a separate mention.

Finance and Credit Restructuring to Extend Economic Reform and Ready RSFSR Economy for Local Autonomy and Economic Accountability

State budgets of autonomous republics and local budgets for krais, oblasts, Moscow and Leningrad were set at R42.0 billion of revenues and R44.8 billion of outlays for 1990.

Under new economic management conditions, many enterprises have accumulated vast unused financial resources which currently cannot be tapped to carry out industrial and social development of labor collectives. Meanwhile, the economic situation in the republic and in some regions requires new ways of tapping the resources of enterprises with proper financial compensation. To attract idle funds on a credit basis, new forms and methods, such as securities markets for bonds, stocks, etc., may be used to mobilize such funds, even though they may not be typical for our economy.

There is plenty of funds to be mobilized. RSFSR enterprises have some R31 billion left over in their economic incentive funds alone.

In order to fully implement the programs of accelerated development of the social and cultural sector and infrastructure in general, we must broaden the practice of using the funds of enterprises, sovkhozes, kolkhozes and cooperatives both to provide social benefits to their employees and to develop the social and cultural sector, to improve the quality of life and for other urgent needs in areas where their employees and their families live.

Given the restructuring of economic management and a greater say of union republics and regions in solving their economic and social problems, we need radical changes in the activity of republic and local government entities. Overall, the expense of maintaining organs of state

power, administrative organs and the courts make up 0.8 percent of budgetary outlays in the republic.

Not everything has been done to scale down management staffs and reduce their costs. In the system of economic management, the role and duties of ministries, agencies and local administrative bodies have not been changed radically enough.

The networks of the RSFSR Ministry of Motor Transport, the RSFSR Ministry of Housing and Civilian Construction, the RSFSR Ministry of Water Resources, the RSFSR Ministry of Consumer Services and RSFSR Ministry of Housing and Municipal Services have set up and continue to maintain entities with large management staffs of their own; their staffs are 1.5-to-3 times larger than those of their predecessors, while no cardinal improvement in their work has occurred.

In light of current needs, the RSFSR Ministry of Finance will have to restructure the system of collection and disbursement of budgetary funds, making the process more democratic, and rebuild the tax inspection service. The great responsibility of improving the credit system and bolstering money circulation will fall onto the shoulders of banking entities.

We will also have to pay more attention to accounting, making sure that accounting figures are reliable and that government funds are used in a legal manner and are safeguarded. It is time to restructure control and inspection activities. We should specially stress that our republic has everything it needs to overcome difficulties in the development of its financial system and money circulation.

The report on the implementation of the RSFSR state budget for 1989 is hereby also presented for consideration to the RSFSR Supreme Soviet.

Bogomolov Cites Concern Over Moscow Development, Self-Financing

904A0081A Moscow MOSKOVSKAYA PRAVDA in Russian 14 Nov 89 p 2

[Interview with Academician Oleg Timofeyevich Bogomolov, USSR People's Deputy and director of the USSR Academy of Sciences' Economics of the World Socialist System Institute, by MOSKOVSKAYA PRAVDA correspondent M. Makhlin: "Cost Accounting? But What Will the City Dweller Receive?"; date and place of interview not given]

[Text] Our interlocutor is Academician O. T. Bogomolov, USSR People's Deputy and director of the USSR Academy of Sciences' Economics of the World Socialist System Institute.

[Makhlin] Let us begin, Oleg Timofeyevich, with this. You are a Muscovite. As a Muscovite, what in Moscow dissatisfies you?

[Bogomolov] I would say, not only dissatisfies, but also frightens and plunges me into a state of very great concern. Moscow is growing, but not because this is being dictated by the interests of the people who live here. The very organization of the economic and political affairs in the country leads to the excessive concentration of the populace in the cities and to an unwarranted urbanization, which is capable ultimately of "smothering" these same cities.

The tendency toward urbanization is being observed throughout the entire world, but it has become something ugly in our country. I am talking about the supply system, the establishment of special privileges for large populated areas, the existing passport system, the inefficient distribution of productive forces and culture. As a result, our Moscow is becoming a focal point of people who, it may be said, are destroying their own locality, the cultural layers of which, in my opinion, have already suffered substantially.

It would be wrong to seek a way out of the situation, as they say, locally, within the limits of the city boundary. The problems are more profound. And it is necessary to reflect not just on local decisions, but also on union-wide decisions. I will explain this idea.

In his own time, Engels spoke about the fact that the triumph of new social relations should lead to a uniform settling of people across the territory and to the uniform distribution of productive forces. Unfortunately, this uniformity is not being achieved in our country; rather, conversely, we are becoming witnesses to an extraordinary territorial disproportionateness, which is placing us in an incomparable position with the Western states. Look how the uniformity in the distribution of the population in the United States of America is increasing—a mass of small towns, good transportation arteries and a significantly more equitable distribution of culture and science across the territory of the entire country.

And in Europe? If you take the FRG, then right in the outlying areas, dozens of universities are encountered, from among which it would be difficult to isolate the most important and advanced. On the other hand, this country, relatively compact in size, of course, cannot be compared with the Soviet Union and here there has been a different historical settling process. But, all the same, we see how the disproportionateness is increasing in our country, while there there is a policy of dispersal. And the people are benefiting from this and I am not talking really about any military or similar aspects.

This is why, first of all, the gigantic concentration of people in one place, the enormous influx of non-Muscovites, the erosion of the traditional culture in the city and the transformation of Moscow into a courtyard do not suit me as a Muscovite. Indeed, they are coming from all corners of the country to the capital, basically on shopping trips. The neighboring territory—within a radius of 200 kilometers—in general, is oriented toward Moscow's stores.

[Makhlin] Half of the goods turnover in Moscow is occurring due to the people from other cities.

[Bogomolov] In my view, such a social distortion is the result of the Stalinist system of state control and economics. It is from this that both the gigantic drop in morality and the uncontrollability of the city economy take their beginning.

Over the course of a long period of time, we lived under the demagogic slogan: "We will transform Moscow into a model communist city!" A mockery of common sense and the conscience of the people. They should have thought about how to protect the health of the city and how to solve the many urgent problems, or at least the housing problems. To no avail...

In contrast to many capitals or the largest industrial centers of the world, in Moscow, there is an absolute lack of individual construction of houses around the city and in the individual sections. Are these concrete boxes really the ideal of architectural creativity and domestic comfort?

Take London, take New York. In London, you will find dozens of cottages with splendid little yards, which create for a person a comfortable living environment. New York is surrounded by hundreds of small towns in which the townspeople live, while they go to work using the splendid highways or electric railway. Is it far? Perhaps, but New Yorkers prefer to live in their own individual houses with all the comforts and with a front yard—outside the city. How should the problems of a more uniform settling of people be solved? I believe that, under current conditions, these problems are solvable, although such a level of public services as there is in Moscow cannot be quickly provided in other regions of the country. But, indeed, even there, there is a whole series of advantages which people could set up among their own values. I am talking about the possibility of living in a good environment and healthy climatic conditions.

[Makhlin] Let us suppose that an alternative to living in the capital was established for people. But then the question arises—how is Moscow, with its multisectorial industry and colossal city economy, to survive without additional workers? Now the influx has supposedly been stopped and this, understandably, speaks of social and technological progress, but my readers are asking: how warranted is the existence in the capital city of such colossuses as ZIL [the Motor Vehicle Plant imeni I. A. Likhachev] and of such enterprises as *Serp i molot* [Hammer and Sickle], which produces metal for the entire country and receives "semi-finished rolled products" from other cities? Are there analogs in other capitals?

[Bogomolov] Capitals vary greatly, indeed. There are capitals which are purely administrative centers—this includes the American capital, Washington. This is the administrative and political capital, while the real economic capital is New York, which has focused on large

industry and the business world. London, perhaps, is both the one and the other: both the political capital and an industrial center.

So that there are different models. This is not the point. There should be a policy for the development of the city. Indeed, it can grow to such dimensions until it turns into a megapolis, drawing into itself all the small cities and, alternately, residential districts and industrial zones. Or it can gradually stop its own growth and subsequently improve its own quality. It seems to me that it is time for Moscow to choose the second version.

The influx of people from outside should be natural and regulated by both economic and social laws. In any case, not generated by artificial factors of a special privileged position.

With regards to natural limiters, they can and should be present. For example, the cost of housing. If housing is free and is distributed, as the common saying goes, "from above," with the blessing of the authorities, but the authorities cannot find people in the city and they recruit them from other regions, promising the new arrivals housing, then they settle in and later they fetch their relatives—this is purely a sociopolitical factor in the growth of the city. Where are the native Muscovites supposed to go?

I was born in Moscow, in the very center of the city, a 3-minute walk from the Kremlin. But I cannot count on this little homeland in getting an apartment. And when they gave me a room in a communal apartment, I moved myself to Yugo-Zapad. Since then I have been a resident of Yugo-Zapad, although my mother died in that same "communal apartment" in the city center.

And who is living now on Moscow's central streets? There is the new privileged stratum, which came from other cities. Muscovites, my electorate, complain that they have been evicted from the center of the city to individual apartments in five-storied buildings on the outskirts of Moscow. Time has passed and already these recently outlying regions are becoming very frequently privileged regions. The five-storied buildings are being torn down and, in their place, better-built houses are being erected and—did you guess it?—again, it was not the native Muscovites who were being settled there, but rather, someone else. The Muscovites are moving beyond the Beltway. This is a social injustice.

But, let us return to the theme of our discussion. I believe that there are enormous work force reserves within Moscow. The structure of the city can and should be changed not by closing needed state enterprises, but by the gradual transformation of this structure.

In such a city as Moscow, there should be greater development of the services rendered to the entire national economy. These are the services for management, for the working out of scientific problems and the

like. But, if we take industry, then, indeed, there are sectors which are necessary to each city—light industry and the food industry.

Unfortunately, here we have gigantic distortions. In addition, the services sphere is also underdeveloped on the whole across the country. Yet, indeed, it can create a lot of new jobs for those who will be discharged from various units of the management apparatus and industry. So that it is necessary to create adequately attractive conditions in the services sphere. The people here, according to strict state evaluations, cannot, most likely, exist honestly and have been compelled to resort to tricks to maintain their standard of living. We see this quite frequently in the example of trade. In my opinion, the entire organization of trade is directed in our country at having its workers, whether they want to or not, strive to extract so-called unearned income.

With regards to industry, here we need to think about how to streamline it. What good does it do to have a modern plant, built by a foreign company no less, for which we need two or three times as many workers as in the West, with the same turnover. Here we must not blame the mirror, but rather, seriously analyze where and in which sections efficiency is disappearing.

[Makhlin] Let us take the example of the Ford plants. Here there is a complete city, such as we have at Naberezhnyye Chelny around KamAZ [the Kama Motor Vehicle Plant] and other new industrial centers. And in Moscow, there is a motor vehicle giant, and not just one. And the Muscovites are disturbed about the advisability of further development of ZIL and AZLK [the Motor Vehicle Plant imeni the Leninist Komsomol]. Would it not be simpler to establish, in new sites outside Moscow, plants which would compete with the veterans of our homeland's motor vehicle industry?

[Bogomolov] In this instance, I would refrain from extreme evaluations. Indeed, it is easier, simpler and more advantageous sometimes to augment the available industry's capabilities than to establish something new. But, finally, take certain American cities—such as Chicago or Detroit. These are focal points for enormous plants and, along with them, business centers with a university and the development of culture and so on. They coexist splendidly.

[Makhlin] Regional cost accounting, for which Moscow is preparing, raises ever more acutely the problem of payment for the resources of the city environment. What is your attitude toward this?

[Bogomolov] It must be taken into account that, throughout the entire world, the cost of the land is taken into consideration. And the cost varies greatly depending, for example, on where the plot is located—in the center of the city or on the outskirts, in a region which is more or less ecologically favorable, and so on. The limitedness of the city's territory—this is especially felt in Japan, where a patch of land has an unbelievably

high price, which affects rent and the cost of hotels—makes it necessary to engage in multistory construction.

Recently, I was in the United States of America and certain things, I will tell you frankly, surprised me. Thus, the cost of housing in a small city not far from New York, in fact, in another state even, in Princeton, is significantly higher than in New York itself. What kind of place is Princeton? It has a university and small enterprises, which are developing high technology. The comparatively high cost of living is explained by the fact that there is a possibility of obtaining work, there is culture—a university, a mass of opportunities for those who are working in promising fields of knowledge, plus the very locality, which is favorable to a healthy life. As you see, the cost of housing, even there, is determined by various factors. And the people, depending on how they improve their own material position, can change this housing, finally attaining the version which suits them.

[Makhlin] So it has turned out that there are in Moscow both industrial rayons and bedroom rayons, where people go only to spend the night.

[Bogomolov] You and I are in one such bedroom rayon right now—Sevastopolskiy.

[Makhlin] The rayons are now becoming a basic unit of the territorial cost accounting. Just how are these bedroom rayons supposed to make ends meet, if they can not count on the profits of industrial enterprises?

[Bogomolov] I think that, under current conditions, they cannot provide for themselves. In Sevastopolskiy Rayon, where I live and work, there are several hundred thousand people in new houses or in houses built at the end of the '50's. There is almost no industry. There are a number of research institutes, which do not earn money, and there is commerce, which has been poorly developed. So that the rayon is in no condition to provide for itself.

But residential rayons, devoid of industry, exist in all countries. And, in my opinion, a regional system of cost accounting should not be identified with self-financing, leaving room for subsidies.

Cost accounting presupposes that the assets, which a given territory possesses, are at the disposal of the local organs of power. That is, the local organs have some kind of income of their own and distribute it efficiently in such a manner that there is never a need to appeal for subsidies. Thus, they can not be on total cost accounting, that is to say, on self-financing.

But then, there are other permissible variations: when one territory or another has too great an income from industrial or economic activities and this income greatly exceeds local needs, then the assets are moved into the state budget. Such redistribution exists everywhere. And all this needs to be taken into consideration during the determination of the territorial boundaries of the rayons.

[Makhlin] Perhaps the existence of bedroom rayons in the large cities is justified if the ecology is taken into account? However, an attempt is being observed to make industrial and bedroom rayons.

[Bogomolov] I agree with you. And I propose not only keeping the bedroom rayons, but also creating conditions so that people would live, if they wanted, in the suburban Moscow area, in the cottage rayons, where there should generally be no kind of industry whatsoever. People there can have a personal plot, their own house, a car and a public transportation stop for maintaining contact with the city center.

In brief, there are different variations. There may be a purely residential, bedroom rayon, but even it is not capable of getting by without commerce. If the tax system were set up according to the principle of the imposition of indirect taxes on individual products sold in a given rayon, then self-financing would be ensured quite practicably. For example, a tax of 2, 3, 5 or 10 percent, for the benefit of local municipalities, could be imposed on everything sold in all the commercial shops in a given rayon. And then the needed amount would be there for maintaining order and supporting local self-financing. We do not have such a system of taxes added to the cost of goods. We have enormous taxes, but they are set long before the goods reach a given rayon.

Here is a living example. Friends invited me once to go from New York to the neighboring state of New Jersey. Why? Because there the prices for all goods are lower than in New York. New York is an enormous city, with large expenses for the infrastructure, and the taxes there are higher. In the neighboring state, the very same item sells at a cheaper price. Now, if we would introduce such a system...

[Makhlin] But is there also a difference in New York's regions themselves?

[Bogomolov] No. Within the city, everything is the same. There is already a kind of redistribution between the regions there. It may be that the taxes are already coordinated with entrepreneurial activities.

The tax in the price makes it possible, of course, to support the local organs of power. And can really reach such a level that the subsidies of city or central organs will be reduced to a minimum. In this instance, the local authorities have an interest in commerce which functions well, so that the residents do not travel to other regions to shop and do not leave their own incomes there.

[Makhlin] What do you think about the idea? There are 33 rayons in Moscow. Some operate better, some worse. Some have created conditions for industrial work, some are concerned about the development of the cooperatives movement and some are more involved with individuals. To put it briefly, a rayon derives a considerable sum. It is reasonable to assume that the rayon soviet of people's deputies, at its own session, in determining

priorities, notes: we have now, they say, a very bad situation with regards to the maintenance of order, so let us hire for the internal affairs administration an additional 100 people for difficult patrol and post duties. As for some of the other needs—health care and the like—they can wait, we will worry about them next year. We have, for example, a lower illness rate than in other rayons. Or, conversely, it is necessary to allot resources for medicine and "to rein in" the militia budget, if there is order in the streets.

Then there occurs a stratification, which corresponds to the principles of social justice, between the standard of living of this rayon and the city and between the rayons. And this would draw the tax-paying voters closer to the administrative organ. The populace would be compelled to be engaged actively in maintaining order and health.

[Bogomolov] It seems to me that, in general, the idea of regional cost accounting and the economic self-reliance of the individual rayons cannot be separated from self-management. It is necessary to strengthen self-management at the local rayon level and to bring the economic base under this self-management. Thus, the idea is not simply to engage in a discussion about the fact that order needs to be maintained, cleanliness observed and the ecology preserved, but rather, that there be genuine levers of influence on the solution of these questions. And their own budget, if there are sources of income, and if there is a fixed, let us assume, sum of revenue from superior organs, while all the rest depends on skill and efficiency in the use of local resources. Of course, differentiation between rayons is inevitable. And each one will decide what it needs to do: either reinforce health care and build sports structures or a new polyclinic or establish a series of commercial shops. What is required here are initiative, independent action and self-reliance. It is more complicated with monetary assets.

There is no hard currency, but there should be flexible, intelligent decisions. Unfortunately, in recent times, our government has committed a very large number of big mistakes, having parted with the existing hard currency laws. The notorious "Berezka" [Birch Tree] stores served as a stimulus for our inflated staffs of employees of the embassies and trade delegations abroad, nevertheless, not to spend their personal assets abroad, but rather, they have endeavored to bring them into the Soviet Union. We have been deprived of all this. We have been deprived, by my calculations, of a quarter of a billion dollars annually. Of this amount, it is likely that no less than 100 million went to Moscow. The reason being that there was a network of these stores.

What is to be done now: does the city need this hard currency? I believe that Moscow could earn it if the city had specific foreign trade authority.

Simply exchanging rubles for hard currency is possible in principle, but the state does not have this hard currency today. A more practical path would be if our Moscow

enterprises obtained access to the foreign market and a portion of the tax payments were made in hard currency. Then it would appear in the city budget.

Armenian Gosplan Head Highlights Goals of 1990 Plan

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3 Dec 89 pp 1-2

[Interview with Mikhail Tsolakovich Mkrtchyan by R. Karagezian: "Armenia's Gosplan Chairman Discusses the Draft Plan for the Republic's Development in 1990"; place and date not given]

[Text] The Armenian SSR Gosplan worked out a draft of the 1990 State Plan for the Republic's Economic and Social Development. It was discussed at the Armenian SSR Council of Ministers and then was submitted to the bureau of the Central Committee of the Communist Party of Armenia for consideration. A collective study of this draft made it possible to introduce corrections and clarifications in and supplements to it.

Now the draft will be submitted to the regular session of the Armenian SSR Supreme Soviet for consideration.

An Armenpress correspondent asked Mikhail Tsolakovich Mkrtchyan, deputy chairman of the Armenian SSR Council of Ministers, chairman of the republic's Gosplan, to explain the characteristic feature of the draft plan drawn up for 1990.

First of all, he said, the weighed and all-around consideration of the proposals and recommendations received from local soviets of people's deputies, representatives of various informal organizations, individual scientists, specialists, and citizens is the distinctive leitmotiv in the elaboration of the draft plan. The public "running in" of the draft plan has made it possible to give up a number of outmoded approaches to the development and distribution of productive forces and, conversely, to strengthen the aspects of planned solutions based on the intensification of economic reform and universal development of full cost accounting and self-financing principles.

The draft as a whole is quite fully covered in detailed analytical materials.

[Correspondent] What is the plan's main task and particular feature?

[Mkrtchyan] Under existing conditions it is the performance of operations connected with the revival of the national economy destroyed by the natural calamity, provision of housing and employment for the population of the republic's cities and rural areas that have suffered and for our brothers and sisters—refugees, who were forced to leave their permanent places of residence in the Azerbaijan SSR—and giving help to Nagorny Karabakh within the framework of the well-known decrees by directive Union and republic bodies. This also includes problems concerning an improvement in the republic's

social and economic situation, financial normalization of the economy, and implementation of measures to raise the population's living standard outlined by the social program of the current five-year plan and by additional decisions by directive bodies and the Congress of People's Deputies, as well as implementation of the fundamental provisions for structural investment policy, development of economic reform, and creation of the basis for stable economic development in the very near future.

Ensuring all the operations connected with the revival of the national economy destroyed by the earthquake within the time set will make it possible to reach the 1988 level in most basic indicators in 1990.

In the volume of industrial production in 1990 the excess will total 650 million rubles, including at enterprises of Union subordination—more than 300 million rubles; in the Ministry of Light Industry—125 million rubles; in the Gosagroprom—14 million rubles; in the Ministry of Local Industry—31 million rubles; in the Armpromstroymaterialy Production Association—28 million rubles.

Such are the main goal-oriented functions of the 1990 State Plan for Economic and Social Development of the Armenian SSR.

A simultaneous realization of these functions has made it necessary to determine priorities and to envisage in the draft plan a number of solutions unusual for the previous planning practice.

[Correspondent] Mikhail Tsolakovich, please tell us what are the ways of realizing the main goals and what is the most acute problem requiring extraordinary measures for its solution in 1990.

[Mkrtchyan] An examination of a number of plan versions has made it possible to find the most acceptable ways of attaining the main goals. Their realization is possible, first of all, if dynamism in the republic's economic development is intensified. In this connection it is planned to annually increase national income by 9.9 percent, as compared with 1.5 percent, on the average, in 1986-1989 and national income used for consumption and accumulation, by more than 30 percent, as compared with 5.8 percent, on the average, during the preceding 4 years respectively. These are exceptionally stepped-up rates. However, their reduction would mean giving up the solution of a number of acute and timely problems concerning social and economic development.

In the structure of national income being used resources for current consumption and nonproductive construction were increased to 80.5 percent in the draft plan. This is a highly sensitive level and its full and efficient use will make it possible to reach new goals in the population's standard of living.

A sharp change in the correlations between an increase in the output of group B and group A in industry is a major

structural shift in favor of consumption. Whereas in 1990 industrial production as a whole is to be increased by 10 percent, group B is to be increased by 14.8 percent, while group A, only by 6.3 percent.

A significantly outstripping growth, as compared with other plan indicators, is envisaged for the production of consumer goods (121.8 percent), retail trade turnover (117.3 percent), and paid services for the public (117.3 percent). In essence, such radical changes in the rates and proportions of the entire consumer sector of the republic's economy are planned for the first time.

The plan's social direction is also ensured by the outlined appropriate investment policy. A total of 43.6 percent of the entire volume of construction and installation work is directed toward the nonproductive sphere, as compared with 39.3 percent in the current year.

Thus, the transfer of the economy to a fuller solution of social problems was made in the 1990 draft plan. This is not a temporary measure, but long-term policy, which will be further continued during the 13th Five-Year Plan.

[Correspondent] What role is assigned to enterprises of defense sectors of industry in the solution of national economic problems?

[Mkrtchyan] Here we should especially mention the conversion of these sectors of industry, where the annual output of nonfood consumer goods will increase by 62.6 percent, that is, by as much as the growth in the total production of consumer goods during the period from 1980 through 1988.

Naturally, the realization of this social program is possible only provided production efficiency increases significantly, which is envisaged in the draft plan. The increase in social labor productivity is determined at 4.7 percent, as compared with 3.3 percent of the decrease, on the average, in 1986-1988. National economic output-capital is to be increased by 3.8 percent. Taking into consideration the significant volumes of commissioning of fixed productive capital, the envisaged rate of growth of output-capital, which is negligible at first glance, in essence, is a highly stepped-up assignment for increasing the effective use of the republic's entire production apparatus.

[Correspondent] Now, if possible, please discuss at a somewhat greater length individual key aspects of social development.

[Mkrtchyan] The renewal and development of the material base of the social and cultural sphere and, primarily, housing is paramount here.

At the expense of all financing sources in the new year plans have been made to put into operation 81,000 places in general educational schools, 29,000 places in preschool institutions, 3,680 hospital beds, and a total area of dwelling houses of more than 5.8 million square

meters, including more than one-half at the expense of the forces and funds of enlisted organizations.

For the most rapid provision of the population with housing it is also planned to put into operation 1,500,000 square meters of individual dwelling houses at citizens' expense and with the help of state credit. Thus, according to the draft plan housing conditions of 330,000 people, or almost 10 percent of the republic's total population, will improve.

However, the course of construction of dwelling houses throughout the republic and, especially, in the calamity zone gives rise to serious concern.

Under the new conditions of management we envisage major social measures, which will be implemented with funds earned by enterprises. As a result, the population's monetary income with due regard for the wages of builders enlisted from the country's other regions will increase by 36.6 percent annually.

Retail commodity turnover accepted in the volume of 4.6 billion rubles will increase by 17.3 percent and the volume of sales of paid services, by 11.7 percent, that is, their rates are lower than the increase in the population's monetary income. Hence it is not difficult to see that the 1990 draft plan is presented with an emission of funds. Thereby, the republic can be in an extremely complicated situation next year.

[Correspondent] How will this problem be solved?

[Mkrtchyan] It seems possible to solve it partially by tightening control over the use of the wage fund, growth of small wholesale organizations, and withdrawal of goods from market allocations, especially timber and building materials.

At present we are examining problems concerning the further increase in the volumes of retail commodity turnover and paid services for the public, expansion of the practice of issuing wages or part of them to workers at their request through the saving bank system, and reduction in the issue of cash from cooperative accounts.

To strengthen monetary circulation, we will speed up the realization of the government decision on the sale of apartments in state and public housing to citizens for private ownership.

Provision has been made for the maximum possible commodity exchange with the country's other regions, use of nontraditional ways of accumulating financial resources—organization of auctions for the sale of works of art, jewelry, arts and crafts, folk art industry products, other very scarce goods, equipment, premises, and buildings—expansion of trade at contractual prices and of cooperative trade, and sell-off of all types of motor transport, without which the national economy can manage.

The government took specific steps to find additional commodity resources. It turned to Union bodies and in

1989 we received additional market allocations worth 467 million rubles, including foodstuffs worth 167 million rubles. The following were assigned for Armenia in excess of the allocations: 20,000 tons of meat and meat products, 10 tons of animal oil, 10,000 tons of sugar, and flour, hulled products, tea, natural coffee, refrigerators, television sets, washing machines, furniture, sewing machines, timber and building materials, and other consumer goods worth 200 million rubles.

However, these measures proved to be insufficient to provide the population with the necessary commodity mass and to bring the level of consumption of basic foodstuffs up to physiological norms.

[Correspondent] What is being done in this direction?

[Mkrtchyan] For the purpose of determining the volumes of consumption of the most important food products and goods in daily demand, in accordance with the government decision working groups were established in every city and rayon. They should work out proposals for finding additional commodity resources in order to bring their consumption volume up to the established physiological norms.

Improvement in food supply for the population is especially urgent. Taking this into consideration, a radical program for changing the strategy of realization of agrarian policy has been developed in the republic. The following are its basic directions: a decisive transition to the development of agro-industrial production on the basis of diverse forms of possession, use, and disposal of property leading to the creation of equal economic conditions for all types of management, that is, kolkhozes, sovkhozes, processing and other enterprises, organizations of lessees, cooperatives of leasing collectives, peasant farms, and citizens' private subsidiary plots, all possible strengthening of their integration ties, and development of cooperative trade in rural areas.

An increase in the production of livestock products acquires great importance. For 1989 market allocations of meat and meat products were approved in the volume of 143,100 tons, including from local production, 68,800 tons. The data cited indicate that meat obtained from all-Union allocations makes up more than 60 percent of the total quantity of meat consumed by us. Such a ratio creates considerable difficulties in stably providing the population with meat and meat products. In this respect we greatly lag behind all-Union indicators and the physiological consumption norm (63 kg per capita). Our actual consumption is 49 kg. This complicates work during the distribution of resources of meat and meat products between the urban and rural population. Taking into consideration the existing tense situation with the formation of resources for meat and meat products, the Armenian SSR Council of Ministers set for Aykoop the assignment to buy meat from the country's other regions at cooperative trade prices in the volume of 25,000 tons next year.

A measure for increasing poultry production volumes is now being worked out in the republic. In 1990 it is envisaged increasing poultry production to 50,000 tons instead of 21,000 tons in 1989, which will greatly alleviate the tension with meat resources.

An expansion of products produced by public dining enterprises themselves occupies an important place in an increase in commodity resources, which the market needs.

Evaluating this work from the standpoint of today, it is obvious that the state of public dining in the republic cannot be considered satisfactory. We have considerable losses of our own products, which occur as a result of the unsatisfactory use of production capacities at kitchen factories and confectionery shops. For example, in the country such capacities are used 68 percent, but in Armenia, only 45 percent. Meanwhile, our opportunities to sell our own kitchen products are unlimited.

Discussing the plan's most important tasks, Gosplan chairman said that the quantitative determination of sectorial and territorial tasks in the draft plan differs significantly from the assignments and proportions of the 12th Five-Year Plan. These deviations are due both to the consequences of the earthquake and to the development of economic reform, whose many fundamental principles have been introduced into economic life after the approval of the five-year plan.

The work of the agro-industrial complex is of great importance for the stabilization of the consumer market. Its development is based on the decisions of the March (1989) Plenum of the CPSU Central Committee. The draft plan for the development of agriculture was worked out with due regard for the real possibilities of eliminating the consequences of the earthquake and alienating agricultural land for the construction of projects in social-cultural and production spheres in the calamity zone.

The gross output of the agro-industrial complex is envisaged with a growth of 106.5 percent.

For all farm categories grain and potato purchases are envisaged at the level of the five-year plan. State procurements of the following are envisaged below the five-year plan: tobacco—in connection with the reduction of sown areas and their allocation for the sowing of perennial grass and geranium on the basis of really existing possibilities; sugar beets—in connection with the destruction of the sugar plant and inadvisability of restoring it; grapes and fruits—owing to the damage to sizable areas of vineyards and fruit orchards.

In animal husbandry great difficulties are connected with the restoration of the livestock population, especially on the population's private subsidiary plots. The cattle population will be 104,000 head—including the cow population, 52,000 head and the sheep and goat population, 520,000 head—below the assignments of the five-year plan.

In order to restore the livestock population, on the population's private subsidiary plots provision has been made for the delivery of 25,000 head of cattle, 26,000 head of hogs, and 25,000 head of sheep and goats to the republic from the country's other regions.

Minifarms are being established in the public sector—25 this year and 125 such farms next year. They will contribute to an increase in the production of livestock products.

State procurements of meat are to be lowered by 4,000 tons, as compared with the five-year plan, of milk, by 45,000 tons, of eggs, by 30 million, and of wool, by 0,300 tons.

More than 110 million rubles are allocated for nonproductive construction in rural areas, which is 34.4 percent more than in the current year's plan.

The construction of housing, schools, water and gas supply networks, and hard-surface roads is to exceed the five-year assignment. Individual housing construction in rural areas will increase 2.4-fold as compared with 1989.

In material production, as before, priority will be reserved for industry, whose development is envisaged under conditions of continued construction and restoration work on eliminating the consequences of the earthquake.

Annual industrial output as a whole will increase by 10 percent. At the same time, at enterprises, which have suffered from the earthquake, but are restoring capacities in 1989-1990, output will increase even more—approximately 1.5-fold. It should be especially stressed that the production potential destroyed by the natural calamity will be basically restored.

A high rate of development is envisaged for machine building (114.5 percent), social (122.3 percent), and construction (115.9 percent) complexes. The policy of an accelerated development of priority machine building, machine tool building, and instrument making sectors and the radio electronics industry will continue.

In motor-vehicle transport the volume of freight transport will increase by 13.1 percent.

Provision has been made for the further reduction in the expenditure of petroleum motor fuel by replacing it with gaseous and diesel fuel.

In railroad transport provision has been made for increasing the volume of freight dispatch up to 16.5 million tons, that is, 4.4 percent more than in 1989. Freight turnover will increase by 1.9 percent.

In accordance with the assignment of the Commission for Eliminating the Consequences of the Earthquake of the Politburo of the CPSU Central Committee technical and economic calculations for the advisability of building a new Leninakan-Bogdanovka railroad line have been worked out. At present its calculations are

being examined by experts in the USSR Ministry of Railways. When the conclusion is received, the construction problem will be examined in the USSR Gosplan.

Problems concerning the development of motor road and railroad networks both within the republic and with their outlet to the Black Sea in Georgia and to proximal border foreign states are also being examined now.

In capital construction at the expense of all financing sources, with due regard for the funds of enlisted Union republics and organizations, plans have been made to allocate on the order of 4.7 billion rubles of capital investments—a rise of 16 percent as compared with the 1989 plan—for the construction and restoration of projects in the calamity zone.

Without taking the funds of enlisted organizations into account, state capital investments will increase by 15.4 percent, including construction and installation work, by 14.4 percent.

Next M. Ts. Mkrtchyan said that the USSR Government adopted a decision on transferring builders to new principles of management. In 1990 the transition to an evaluation of the activity of construction organizations and to settlements of accounts with the client for finished construction output will be made, "turnkey" construction of nonproductive projects will expand significantly, and the transition to extension of credit for construction will begin.

In the earthquake zone provision has been made for the restoration and construction of the overwhelming part of projects in the social sphere: housing, general educational schools, children's preschool institutions, hospitals, outpatient and polyclinic institutions, and clubs.

A total of 109 million rubles have been allocated for the restoration and new construction of nine light industry associations in Leninakan. Hosiery, knitwear, footwear, sewing, and other enterprises are to be restored.

A total of 1,246,600 square meters of housing, 19,600 places in general educational schools, 4,900 places in children's kindergartens and nurseries, 1,190 beds in hospitals, outpatient clinics and polyclinics for 3,550 visits per shift, community centers for 40 work places, 3,300 places in motion picture theaters, 25,000 square meters of trade areas, 13,000 seating places at public dining enterprises, 12,000 square meters of general commodity warehouses, and others are to be put into operation with the forces and funds of enlisted republic organizations in Leninakan.

The construction of the Avtogenmash Production Association and of the precision machine tool plant will continue in the city of Kirovakan. A total of 16 million rubles of capital investments are envisaged for capital construction and the restoration of five light industry enterprises, including footwear, knitwear, and fur factories. A total of 519,000 square meters of housing, 10,000 student places in general educational schools, 3,500

places in kindergartens and nurseries, 580 beds in hospitals, outpatient clinics and polyclinics for 100 visits per shift, 800 places in motion picture theaters, and others will be commissioned here.

It is considered advisable to build the city of Spitak on a new place with the construction of previously functioning and new projects for production purposes and in the social and cultural sphere.

From all financing sources 1,093 million rubles of capital investments are allocated for the further social and economic development of the city of Yerevan. A total of 462,000 square meters of living space, children's preschool institutions for 2,290 places, general educational schools for 6,486 student places, hospitals and polyclinics for 480 beds and 930 visits per shift, a community center for 40 work places, and others will be commissioned.

Throughout the republic in 1990 it is planned to restore dwelling houses on an area of 800,000 square meters, including 450,000 square meters in Leninakan and 190,000 square meters in Kirovakan.

Furthermore, repaired residential premises of a total area of 350,000 square meters are to be put into operation.

The draft plan gives priority to ecological problems. A total of 59,000 million rubles of capital investments, or 1.5-fold more than in 1989, are allocated for environmental protection measures. Not a single sector has such growth. In particular, it is planned to put into operation biological purifying installations of a capacity of 17,000 square meters in 24 hours in Sisian and an experimental production fish hatchery of an annual capacity of 1.5 million young fish in the city of Sevan.

Work on expanding the Yerevan Aeration Station and on constructing purifying installations in Kirovakan, as well as work on constructing a sewage collector near Lake Sevan, will continue.

As a result of the measures taken by the government, the foreign economic activity of enterprises is expanding and the volumes of deliveries of goods for export are increasing. In the new year the export volume will reach 25 million rubles. In connection with the elimination of the consequences of the earthquake many proposals for the establishment of joint enterprises were received both from foreign firms and from the republic's enterprises and associations. More than 20 protocols with foreign firms were signed by the Gosagroprom, the State Committee for Construction Affairs, the Ministry of Light Industry, the Ministry of Local Industry, and the republic's other ministries and departments.

Armenia's proximal border trade with Turkey, Iran, Syria, Lebanon, Jordan, and Kuwait is to be organized.

The participation of the Armenian SSR in an international fair in the city of Mexico (Mexico) is planned for

1990. There are proposals for holding commercial fairs in the United States and Kuwait.

[Correspondent] The last question: How will work be carried out in Nagorny Karabakh in 1990?

[Mkrtchyan] At the expense of all financing sources work worth 34.5 million rubles will be carried out in Nagorno-Karabakh Autonomous Oblast in the new year.

Plans have been made to commission dwelling houses of a total area of 6,000 square meters, children's kindergartens for 140 places, a hospital for 30 beds, a polyclinic for 100 visits per shift, a school for 330 student places, a sports complex, a community center, production premises of an area of 10,200 square meters, and gas supply lines 56 km long.

Possibilities of establishing fisheries, opening affiliates for the output of food products obtained on the basis of local raw materials, and ensuring the construction and reconstruction of a shop for the production of confectionery products are being examined.

The development of a network for the purchase of meat and other agricultural products with a view to stimulating an increase in production volumes and ensuring the employment of the oblast's population is also planned.

Jointly with the oblast's leadership a goal-oriented program is envisaged for the organization of new affiliates of industrial enterprises and associations in settlements of Nagorno-Karabakh Autonomous Oblast and, especially, in rural ones both by Armenian SSR ministries and departments and by those of Union subordination located on the republic's territory. This will make it possible to partially solve such an important social problem as ensuring the population's employment.

In conclusion the Armenian SSR Gosplan chairman said that the indicators and proportions of the 1990 plan, despite all difficulties, are aimed at a social reorientation of the economy and financial normalization and envisage the solution of a number of vitally important problems.

The task lies in purposefully directing the public activity that has now gripped all the strata of the population toward a fight against losses and mismanagement, strengthening of labor and performance discipline, unconditional fulfillment of plans and contractual obligations, and improvement in the quality of output.

Without intense labor we will not get out of the difficult situation, in which the republic is, and will not solve problems in the cause of improving the population's life. We must organize an efficient process of real public production, when every labor collective is tied through its output and contracts with tens and hundreds of other labor collectives—this is the powerful material factor in workers' consolidation.

The 1990 plan will become the plan for the consolidation of society on the path to a complete improvement in the economy and social progress.

Its successful solution will enable Armenia to prepare itself for a transition to full cost accounting and self-financing and to take a big step forward in the cause of economic development and perestroika.

Demographics, Low Economic Base Complicate TuSSR Self-Financing

904A0075A Moscow *EKONOMICHESKAYA GAZETA* in Russian No 46 Nov 89 p 15

[Interview with S. Niyazov, first secretary of the Central Committee of the Turkmenistan Communist Party, by *EKONOMICHESKAYA GAZETA* correspondent: "Live and Work Together"]

[Text] *The CPSU platform "Nationalities Policy of the Party Under Contemporary Conditions" particularly stresses the importance of attaining an optimal relationship between the economic authority of the USSR and the union republics. This is a difficult and multilevel task. S. Niyazov, first secretary of the Central Committee of the Turkmenistan Communist Party, discussed ways of handling it in an interview with an EKONOMICHESKAYA GAZETA correspondent.*

[Correspondent] Saparmurad Atayevich! Strengthening the economic independence and responsibility of republics is a key question in contemporary nationalities policy. There are various viewpoints on this problem. How is the idea of regional cost accounting being accepted in Turkmenistan?

[S. Niyazov] We are unconditionally for strengthening economic independence. Our workers have had their fill of excessive economic centralization, when, for the sake of gross output, pressing social problems were given less priority and there were gross distortions in the economy's sectoral structure.

Thus, life itself is forcing us to establish order in our own house. Only this must be done skillfully so that we will not make a mess of things. So far contradictions in our life are multiplying more quickly than they are being solved. This applies to politics and to economics; after all, they are indivisible.

Today the republics are seeking a way out of the existing situation. And we too are seeking it. I want to openly share an idea that disturbs me. Recently the idea of group egoism has started taking root in our economic activities. Will we avoid this at an interrepublic level if we give ourselves over entirely to constructing sovereign economic models without forecasting their political results? After all, we are still groping our way towards economic independence. We are often influenced by the example of others rather than by studying the problem in all its specificity and complexity.

The difficult situation now facing the country must not be forgotten. Almost any careless step and unplanned decision can intensify it and make it irreversible. The unity of the country is the basis of our existence. It would be very dangerous to experiment in this area. The well known fable about the swan, the crayfish and the pike automatically comes to mind. We should not become like these characters!

In no way do I want to disparage the healthy processes begun in our society; much less am I appealing to excessive skepticism and suspicion. I am only advocating caution, clearheadedness and precise scientific study. Incidentally, a lot was said about this at the recent Central Committee Plenum. I think that an important political step was made by the resulting platform planks on establishing several forms of cost accounting meeting the specific requirements of union republics and differing in the degree of their economic independence.

[Correspondent] How would you characterize the "Turkmen" model of regional self-management and self-financing? There is somewhat more than a year prior to the republic's conversion to cost accounting. Are you afraid of this prospect?

[S. Niyazov] I have already mentioned the disquieting socio-economic situation in the republic due to contradictions and disproportions in economic activity. I would like to support this by examples. With regard to most indicators for standards of living the republic lags behind the average level in the country and is one of the last among union republics. The present level of productive forces in Turkmenistan is one-sided and imperfect. Take industry for example. Priority here was given to sectors oriented towards the extraction and primary processing of raw materials. They make up 60 percent of the total. Although these sectors function effectively, their contribution to the republic is insignificant.

We now haul in meat, milk, potatoes and several other products that we can and should provide for ourselves. To these problems are added the most acute—the employment of labor resources. More than 20 percent of the able-bodied working age population in the public sector is unemployed.

It has now become almost the fashion to blame all faults on the center. I disagree with this narrow viewpoint. By swimming with the current we ourselves have allowed many distortions in the economy, including the hypertrophic development of cotton production.

We expect that republic cost accounting will help overcome the negative tendencies in economic management practices. After all, Turkmenistan has considerable economic potential. It is sufficient to note that we produce 3.8 quintals of cotton per capita, extract 1.5 tons of oil and 25,300 cubic meters of natural gas. This is quite a sound base for the region's self-financing.

The TuSSR Council of Ministers is now studying proposals and developing principles and mechanisms for

territorial economic management that will give consideration to the features and regional conditions in the Turkmen SSR. A special commission with a temporary creative collective has been formed. It includes leading scientists from scientific research institutes and higher educational institutions and specialists from ministries and agencies in the republic.

By the end of this year, it is planned to complete the Scheme for the Territorial Development of the Turkmen SSR under conditions of self-management and self-financing. This scheme will delineate management functions for existing levels, reexamine the present administrative-territorial management structure, ministry and agency composition and structure with a view to their functions under the new economic management conditions.

Starting next year up to 40 percent of the turnover tax on final output from our raw materials will go to the republic budget. Enterprises now producing more than 65 percent of industrial output will be transferred to republic supervision and there will be a new relationship with all-union ministries.

[Correspondent] It is felt that fundamental work on the concepts of regional cost accounting is now being done in the republic. However, it looks as if the idea of economic independence is not so popular with the masses in Turkmenistan as it is in, say, Estonia.

[S. Niyazov] I think that this is quite understandable. Every republic has its specific features. Also, when taken in their general historical context, their starting points are far from equal. Whether we like it or not, the introduction of full cost accounting in our republic includes substantial contradictions with the sectoral structure of an economy still only weakly oriented towards meeting the population's demands. Neither should one forget about the special demographic situation and the comparatively unskilled population. The introduction of cost accounting requires the development of a mechanism for evaluating a sector's contribution to the final product. The rational use of nature acquires extreme importance under republic cost accounting. There will have to be limits on the use of the most important types of natural resources so that they will not be quickly exhausted for short term raw material needs.

Understandably, having at our disposition the entire consumer goods complex we can assure its development to the extent the income of the republic permits. To do this we must radically change the economy's sectoral structure and shift a large part of capital investments to the social sphere.

However, this takes time. It is apparent that we will not now succeed in fully doing this with the republic budget. The lagging is too great. In my view, the policy for state assistance to economically develop lagging regions should be implemented through the allocation of resources for specific targeted programs, with their realization under the strict control of people's deputies and the public.

Before working on our own concepts we became acquainted with programs for regional cost accounting in the Baltic republics, Belorussia and other regions in the country. All these models have much in common, but there are substantial differences. Our position is the general strengthening of economic, cultural and other ties with all union republics. We are against economic isolation and for the extensive independence of the republics. But this should not contradict the Leninist model for our unified state. There should be no place here for poorly thought out, and at times openly extremist positions, damaging the unity of our peoples.

[Correspondent] Undoubtedly, problems which have accumulated for decades cannot be solved in a single year. What is the republic's socio-economic situation today?

[S. Niyazov] In the course of preparing for the transition to territorial cost accounting in the republic, the most important programs being implemented are those aimed at saturating the market for consumer goods and developing the material base for the social and cultural sphere. More housing, hospitals, schools and kindergartens have been built than in previous years. Consumer goods production increased by 15.5 percent and the service sphere grew 1.5 fold. National income and production growth rates are increasing. "Labor Resources," a comprehensive program, has been developed and is being implemented. Its implementation made it possible in the last 3 years to find jobs for 73,000 people, to put into operation more than 70 production facilities and to construct more than 20 new shops and branches of light and local industry and consumer cooperatives.

Increased attention is being given to the further development of labor and science intensive sectors of industry, including machine building, instrument building and electrical engineering. The realization of these measures will make it possible to create up to 15,000 jobs in machine building enterprises and, by the end of the 13th Five-Year Plan, have a 3.5 fold increase in the production of machinery, so necessary to the republic and the Central Asian region.

We are also doing a lot of work in another direction—the efficient use of our potentials, natural and raw material resources and the comprehensive development of the region.

New economic relationships, including leasing, are finding use in the republic.

Different forms of collective, family and private contracts are finding widespread use in the agroindustrial complex. There are now more than 8,400 contract collectives to which have been attached more than 60 percent of the total land and 47 percent of the livestock. The work experience of these collectives shows their high efficiency. Labor productivity here is 1.5 fold higher than at ordinary collectives, rural toilers are more interested in final results.

[Correspondent] Today new and more exacting demands are being made upon the party leadership. However, there has recently been talk about the declining authority of party workers. Is something similar being observed in Turkmenistan?

[S. Niyazov] I can confidentially say that in recent years there has been a marked strengthening of the authority of the Communist Party of Turkmenistan, which has already done a lot for perestroyka in economic and political life and given working people realistic views of the social and political situation.

The party's attractive force can only be strengthened by specific advances in socio-economic development. Communists' activities in this direction do not remain unnoticed by working people in the republic. Proof of this: In all voting in the republic the leaders of party and soviet organs obtained the needed support.

It is in the active, principled and vital position of communists and party committees and organizations that I see the main reason for the growing influence of the Communist Party of Turkmenistan on the social and political situation and upon the course of transformation in all spheres of life in the republic.

AGRO-ECONOMICS, POLICY, ORGANIZATION

Supreme Soviet Discussions On Leasing, Land Questions

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19 Nov 89 p 2

[Article by T. Boykova, A. Kostyukov, special SELSKAYA ZHIZN correspondents: "Will They Provide the Land?"]

[Text] There is a question which, according to letters being sent in to the Editorial Board, is arousing the interest of all those familiar with the new Land Law prepared in the Supreme Soviet. Will a peasant or a peasant collective receive land for free and permanent possession, or will a common plowman or bureaucratic worker become the owner in the future? This is of equal concern—once again a judgment must be made based upon letters—between those favoring the "granting of land" and those who oppose such action. The resistance is fully understandable and there is ample reason for viewing the land question as dynamite for any large-scale revolution.

At what stage is the work being carried out on the law? What problems are our legislators dealing with at the present time, why are they arguing and over what questions, and what arguments are tipping the scales? It will be best for the reader if we provide him with a scrap drawn from a "live" verbatim report of one of the last discussions held in the Committee for Agrarian Problems and Food Goods. But initially allow me to make two preliminary comments.

The first. In listening to a dictaphone recording of a 3-hour meeting, we were unable to understand everything being said. It was noisy at times in the auditorium where the committee carried out its work. To put it bluntly, the parliamentary procedures became heated. What do you wish? What question—such was the temperature in the hall.

The second. In addition to the draft principles of land legislation, developed by the agrarian committee jointly with VASKhNIL [All-Union Academy of Agricultural Sciences V.I. Lenin], there is still the plan prepared by the Committee for Legislative Matters, Legality and Law and Order together with the USSR Council of Ministers. A "competition among plans" is still a rare incident for our young parliament. This also explains the unusual nature of the subject of legislation.

The main element of the dispute is the question of land ownership. In the plan of the agrarian committee: land in the USSR is national property and the right to public ownership of land is realized in three forms—state, collective and private-labor ownership. Thus we have in mind here a plurality of ownership forms. In the draft law of the Council of Ministers: land, being the property of the Soviet people, is held in union republic ownership

and is presented only for use. That is, in this variant the kolkhozes, sovkhozes, cooperatives and farms are not owners but rather users of land. It is here that we encounter our chief mistake.

Thus, let us turn to the verbatim report.

A.A. Nikonov: Our first basic disagreement with the Committee on Legislation—concerning private-labor ownership. They are proposing another formula for us: instead of private-labor ownership—a lifelong lease with the right of inheritance. We must make a determination: either we accept this formula or we insist on our own. In the draft law on ownership, approved by the Supreme Soviet for national discussion, the concept of private-labor ownership, as you know, does not exist. How are we to proceed? I believe that if we recognize the peasant farms and recognize the pluralism of the forms of ownership, then it is logical to legalize the private-labor ownership for land.

E.Ya. Grinovskis: I propose to abandon our wording. Why do the comrades fear private-labor ownership? They believe that it will lead to the exploitation of man by man. But it is labor ownership! That is, exploitation is excluded by the very nature of this term.

A.A. Nikonov: Moreover huckstering, guarantees, gifts and the wilful exchanging of land are all prohibited.

V.I. Zadyrko: I do not understand: inheritance is authorized and yet gifts are not. What is the difference? In both instances, there is a change of owner.

I.Kh. Rayg: I do not believe that huckstering should be prohibited. We are adopting a law not for 2-3 years, but I seriously hope for an extended period of time. And thus we must not include in it, in advance, a mechanism which will infringe upon the rights of the proprietor—the owner of the land who, generally speaking, we do not have at the present time. Look for yourself: if a price is placed upon the land, there will be a system of land evaluation and this means that with the passage of time the land will be sold. Not right away, but perhaps after a period of from 5 to 10 years. But it will be sold nonetheless. Thus we must not state today that huckstering is prohibited.

A.A. Nikonov: There have already been many arguments over this question. It is my belief that we cannot proceed with land as we do with other conventional goods—selling and presenting as gifts. Inheritance is quite another matter entirely and we must not mix up different things.

A voice: And what form should this inheritance take—that of a will or testament?

A.F. Veprev: No, we could not then avoid a breaking up of land ownership. In the modern world, nobody is proceeding in this direction. The basis must be not a will but rather a decision on inheritance handed down by a soviet.

O.T. Bogomolov: Please excuse me but it seems that the entire article on ownership is extremely eclectic in nature. It is very vulnerable from a legal standpoint. What does it mean to state that the right of public ownership is realized in the form of state, collective or private-labor ownership? It is illogical to refer to collective or private ownership as public.

S.G. Lushchikov: We have become entangled in priorities. In my opinion, the only economic law which could be adopted today is the Law on Leases. And I also consider the draft law on land to be contradictory. The question of land ownership is in need of serious attention.

Information for the reader: During this meeting, deputies O.T. Bogomolov and S.G. Lushchikov represented the Committee on Problems of the Economic Reform and the Committee on Legislation, Legality and Law and Order. The agrarian deputies listened attentively to their opinion but did not deviate from their own. They endorsed the initial variant of the article on ownership by a majority of votes.

As you have already come to understand, a lease is the basic form for land utilization in the alternative draft law. The advocates of this point of view assume: a free and valid lease provides a peasant or a collective with all the rights of an authoritative manager with regard to his work, his capital and the products obtained. And at the same time, it retains for society the true right to the land. To the question—can one be a land manager and the owner of that land at the same time—the authors of this concept gave an affirmative answer: it is possible.

The plan of the agrarian committee also recognizes a lease. The plan evades the ultimate stating of the question: ownership or a lease. Ownership and a lease are both possible. But this is not meant to imply that there is complete unanimity in the committee regarding leases. The seventh article of the plan turned out to be the one which aroused the most excitement.

A.F. Veprev: we still have two variants of the seventh article. In the first variant, the lessors can be soviets, the collectives of enterprises and social organizations or peasant farms. In the second variant—only soviets, with the exception of a number of cases. We must select in which variant we wish to place this article.

Kh.G. Andreyev: In the second. In accordance with the first, the land will be handled entirely by kolkhozes and sovkhoses. And what have we proclaimed? All power to the soviets and the land—to the peasants!

I.M. Ivchenko: Yes, in the first variant a kolkhoz is a dictator. And the above-mentioned right of the soviets to handle land will be a fiction.

I.Kh. Rayg: In the first variant, the monopolistic right of kolkhozes and sovkhoses to the land is reinforced—this is clear. But is it possible, in the interest of avoiding a

prolonged argument, to engage in a national discussion involving both variants? We could allow the people to make the selection.

A.A. Nikonov: Comrades, the existing reality must be taken into account. If the kolkhozes and sovkhoses are not authorized to turn over the land on a lease basis, then we must have an end to intra-farm leasing. Are we justified in rejecting it?

G.S. Pokhodnya: We do not have any intra-farm leasing! And if we accept the first variant, there will never be a true lease. That which we refer to as a lease is a brigade contract or conventional cost accounting. And let it remain to our heart's content. But it should not be confused with a lease!

B.I. Krasnokutskiy: Whose land will be turned over on a lease basis by a soviet? Will it be kolkhoz land? In such a case, we must include in the law the fact that the soviet takes into account the interests of the owner of the land.

Kh.G. Andreyev: No, the interests of effective land utilization must be taken into account. If the interests of the kolkhoz are considered, then its land will never become available. They will call a meeting and state: nothing is to be given.

D.K. Motornyy: Yes, a general meeting may not provide anything. And so what? I do not understand why we trouble the people. It is apparent what our goal is: to ruin the kolkhozes! It is said that the kolkhozes are not feeding the country, but that farmers with leaseholders are. I cannot agree with this opinion. I propose that the law be written as follows: uncultivated and inefficiently used lands will be turned over on a lease basis. The country has more than enough abandoned, overgrown and water-logged lands. Let these be used on a lease basis. If an individual is a true farmer or leaseholder, then he will accept any land. And then there will be no need to disturb the kolkhozes.

I.M. Ivchenko: This is interesting and yet why must I resort to this extreme. This is my land. I was born here and my forefathers lived here. And yet you may be sent here by the rayon committee. Some thought must still be given as to which one of us must leave. Generally speaking, this is not simply an economic question. It is a question involving the rights of man and the freedom of selection. We are already creating a legal state! And if you proceed in this manner: and do not wish to work at a kolkhoz, then go off into the tundra—here the rights of a personality will not be recognized.

Subsequently there was a rather noisy segment on our recording. Thereafter the results of the vote on the seventh article were announced by A.F. Veprev, who chaired the meeting: the second variant was passed by a margin of several votes. That is, the turning over of land on a lease basis is a right that belongs to the soviets.

As is known, people are motivated by interests. This is completely natural. Thus, it should not come as a surprise to learn that the well known chairman of a Kherson kolkhoz D.K. Motornyy and a team leader from the Oktyabr Kolkhoz in the Don region I.M. Ivchenko differed in their views concerning the rights of a kolkhoz and a kolkhoz member. It is the duty of a parliament to present the best interests of society.

Out of tactical considerations, the journalists chose not to demonstrate their feelings for any one particular orator. Our humble task: to acquaint millions of voters with the deputy debates. The law is for them and for millions like them. And if a reader senses an urge to join in the discussions—be our guest. The principal areas of the dispute and the arguments and positions have all been pointed out

Academician Cites Past Policy Errors, Says Land Ownership a Must

904B0059A Moscow TRUD in Russian 14 Nov 89 p 2

[Article by G. Shmelev, correspondent member, VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin]: "Depeasantization"]

[Text] For many years now we have been watching store shelves grow bare and food prices grow higher, a hidden growth in state trade, and open in cooperative trade and on kolkhoz markets. Food quality is deteriorating. As signs of crisis increase in the economy in general, and in the agrarian sector in particular, it becomes clearer that we cannot continue to move along the same ruts of reorganizations which differ little in their essentials. Without converting laborers from executors of commands to real masters of the land and other means of production, we cannot make a transition in agriculture.

Such a turnaround in agrarian policy is the goal of the present promotion of family and individual contracts, the creation of small self-managing cooperatives within the framework of kolkhozes and sovkhoses, the development of long term lease arrangements and finally, the revival of the peasant economy. Inasmuch as we are steering a course for coexistence and healthy competition between various forms of property, including peasant laborers property, we must develop and legally establish conditions for the development of individually owned peasant farms.

However, a question naturally arises here: Why create something anew, if these farms were essentially never forbidden by anybody? Article 17 of the present Constitution of the USSR states that, in accordance with the law in this country it "is allowed," together with other forms, to have individual labor activity in agriculture based entirely upon the private labor of citizens and members of their families. In once again raising the question of peasant farms, are we not trying to break down an open door? Was it correct for the Law on Individual Labor Activity in the USSR, ratified in 1986, to sidestep "individual activity" in agriculture?

I suggest that this question can only be answered negatively: the "allowance" of this in the recent version was equivalent to forbidding it. On the eve of ratifying the Law on Individual Labor Activity, it would have been fitting to enter individual peasant farms into the Red Book on our economy, if such a book existed. In the entire country there are only a little more than 100 such farms (mainly in the mountain regions in Transcarpathia). It was possible to determine how many single owner peasant farms there were only with the help of the USSR Ministry of Finance, and that because up until 1983 this ministry taxed them at twice the rate of other categories of the rural population. Incidentally, this high rate was dropped only because of the tiny number of such farms. An article on peasant farms was not included in the Law on Individual Labor Activities because it would have been sort of a joke to mention an almost extinct form of farm.

How did it come about that single owner peasant farms, legally not forbidden (and in 1928 the overwhelming majority of rural dwellers, 96 percent, farmed this way), almost completely disappeared in spite of the disappointment many, many rural laborers felt about collective forms of production? There is no need to explain how the high rates of collectivization were attained; everything here is clear. However, we should dwell upon how the path to kolkhozes was converted into a one-way street (this was not true prior to "the great change"). Let us turn to our history, the year of mass collectivization.

Here is an interesting statistic. For the first 10 years—from 1918 to 1927—not more than 1.1 percent of all farms were cooperatives. This is evidence that peasants, including the poor, lacked an inclination towards production cooperation with socialized means of production. In 1929 this figure was only 3.9 percent, but by March 1930 it had reached 58 percent. However, from March to May 1930 it declined by more than half. After the publication of the famous article by Stalin, "Dizzy with Success," peasants fled from kolkhozes almost as fast as had been the collectivization process. Stalin's treachery was that, in signing this article with one hand, with the other he was doing his best to shut the door through which peasants were rushing to get out of kolkhozes so that they could farm their land themselves.

In March 1930, when this article by Stalin appeared, PRAVDA published a model charter for an agricultural artel drafted at the instruction of the Central Committee of the VKP (b) [Bolshevik Party]. This charter (which, in violation of all democratic norms, was drafted without participation by kolkhoz farmers and was not discussed or approved at their congress) categorically forbade the allocation of kolkhoz land to members who had left the artel.

Later, the new model charter for agricultural artels, called the Stalinist charter, and approved by the 2nd All-Union Congress Kolkhoz Farmers and Shock Workers, affirmed that all land used by kolkhozes is

attached to them permanently, and thus deprived peasants of allotments which they had transferred to collective farms. The kolkhoz farmers themselves were "attached" to the kolkhozes by the passport system introduced in 1933.

Then, in 1934, when only 28 percent of the individually owned peasant farms were left, at a special conference Stalin pointed party workers towards the final eradication of them. It was during this period, he said, that those 2-4 percent, the evasive individual farms then in existence, were important... A situation had to be created in which an individual private farmer would do worse and would have fewer possibilities than a kolkhoz farmer. And this was done.

In 1933 individually owned farms produced 19 percent of the gross output, but by 1937 they only produced 1.5 percent. Their share of land was reduced to 0.8 percent. However, even this did not suit Stalin and his minions. In the European part of the RSFSR in 1927 the average allotment to a peasant farm exceeded 13 hectares. By 1939, the decree "On Measures for Protecting the Kolkhoz Farmers' Land from Being Squandered" limited individual peasant farms to one-tenth of a hectare of irrigated land in cotton growing regions, to half a hectare of nonirrigated land and land in sugar beet regions, and one hectare in all other regions. All remaining land was attached to kolkhozes. If there was not enough land for private plots, it was taken from individual allotments.

Not having sufficient land and thus not being able to feed their livestock, peasant farmers reduced their herds. Sometimes a household had only a single cow. At the same time, individual farmers paid increased taxes and performed various labors. Only some "stubborn individuals" could keep their farms under these conditions.

So this is how it turned out for farm laborers, who, under the slogan "Land to the Peasants" were for the revolution and civil war. This is how we arrived at the present situation regarding individual farms, declines in agricultural production and, thank God, to an understanding that peasant farms should, finally, become a part of our agrarian sector with full rights.

What, however, should be done to revive them?

It would be naive to assume that it is sufficient to announce a program to support these farms and then they would start to grow like mushrooms after a rain. No, their revival requires many conditions, first of all land, which is now at the disposition of kolkhozes and sovkhoses. To create peasant farms it is necessary to authorize the withdrawal of farm laborers from agricultural enterprises, taking land with them. This question was raised when the model kolkhoz charter was being amended, but it was rejected under the pretext that there was no reason to recreate individual ownership. The charter stated that nobody had the right to prevent a kolkhoz farmer from leaving a collective farm, and that if this happened the management had to give him... his labor book. So, a farmer's ancestors entered the kolkhoz

with land and a share of property, but to this day it has been possible to leave it only with documents and earnings for the current year.

In advocating pluralism of property, its diverse forms—state, cooperative, individual and others—we should obviously be consistent. Here both managers and the broad masses must be clear: What do we want? Do we want development of individual peasant farms in addition to kolkhozes and sovkhoses and lease contracts (first of all with those that are firmly standing on their feet)? If yes, then why? Based upon the fundamental positions on the compatibility of these farms with collective farms in the further development of our society? Or as a temporary measure—in view of the present critical food situation, in which all means of increasing food production are good?

The answer to this is extremely important. Without it there can be no solution to the question: Should there be a peasant economy and how should it develop in the future? In particular, it is important for the Yushkis family from the Shyashuvits Kolkhoz in Tauragskiy Rayon in Latvia. At one time this family was dekulakized and banished to Siberia for having 7 head of cattle, but is now leasing from the kolkhoz 90 hectares of land, buildings, equipment and is keeping 40 cows. An answer to this question is also important for several thousand peasant farms which have recently arisen in the Baltic region and for the first farm families in Novosibirsk Oblast. In short, it is important for all who are beginning or who want to begin to farm the land in any republic.

In some republics special decrees and laws have been passed regarding this. In Estonia last March a special decree by the Estonian Communist Party Central Committee and the republic Council of Ministers was passed: "On Individual Labor Activity in Agriculture." This decree provides that peasants who want it are given permanent use of the land and their heirs are given first priority rights to its use. Individual farmers can obtain vacant buildings in rural localities, open up bank accounts and get bank credit, purchase and obtain, on a contractual basis, the machinery and equipment necessary for operating their farms. Laws on peasant farms were passed in Latvia and Lithuania. A draft of a similar law is being prepared in Kazakhstan.

However, it appears that all this is only the first step to legally protecting those who want to farm independently. The peasantry is waiting for the Supreme Soviet to renew the Basic Land Law for the USSR and the Union Republics so that it will reflect the changes that have taken place in the socio-economic structure of agriculture.

Land should be returned to the peasantry as an object of ownership. Therefore, it appears to us that land legislation should contain a statute on the possible exit of farmers from agricultural enterprises, taking their allotment with them. There should be reliable protection of

the rights of peasants, who are farming either individually or collectively. This will undoubtedly be promoted by the peasants' associations now being created throughout the country. They could lead the struggle against the all powerful bureaucratic apparatus in the countryside and for the systematic implementation of decisions directed towards reviving the peasantry.

This is all the more important because there are still many obstacles on the path to reviving peasant farms. The press reports that managers are refusing to allocate land not only to individual kolkhoz farmers, but also to collectives desiring to leave kolkhozes and form agricultural cooperatives. Sometimes rayon authorities also refuse to support them. Apparently they are not listening to the voices of the laborers themselves, but to the opinions of those managers who consider intrafarm leases the only suitable form of independent farming.

It is insufficient simply not to interfere. It is necessary to actively help restore peasant farms. Without this they will not be able to stand steadily on their own legs and make a contribution to solving the country's food problem.

Improvements Called for in Leasing Relationships in Belorussia

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BELORUSSII in Russian No 11, Nov 89 pp 12-13

[Article by V.P. Makhankov, deputy director of the Main Administration for Planning and Economic Development of the Agroindustrial Complex of Belorussian SSR Gosagroprom: "Leasing Relationships. How to Raise Their Efficiency?"]

[Text] New and efficient forms of management on the basis of the improvement of cost accounting and the assimilation of leasing relationships have now been approved everywhere and all oblasts and rayons have acquired a certain amount of experience.

From the very beginning we saw the main path of development of leasing relationships in agriculture to be in the transition of kolkhozes and sovkhoses to intraorganizational leasing and in their transformation on the basis of the establishment of lessee cooperatives. This model was acknowledged at the March (1989) Plenum of the CPSU Central Committee to be the most promising one and generally the most acceptable one for the country. Such a point of view of leasing relationships and of the fate of kolkhozes and sovkhoses does not preclude the application of other quite varied forms of leasing in economic practice.

There are now 2,180 kolkhozes and sovkhoses in the republic applying intraorganizational leasing. This is 87 percent of their total number. As of 1 March 1989 in the plant-growing branch, 4,726 brigades and independent links, or 75 percent of their total number, had signed

lease contracts and 78 percent of the plowed area of kolkhozes and sovkhoses had been turned over to leasing.

There are 11,926 brigades and links (72 percent) in animal husbandry working under leasing relationships. 77 percent of the cows, 76 percent of young cattle and 60 percent of hogs have been turned over to their use.

It is very important that lately we have been seeing a new and decisive transition from the establishment of individual collectives working under leasing to the work of all farming subdivisions under leasing principles and to their coverage of interrelated on-farm cycles. The experience of the kolkhoz imeni Sverdlov in Goret'skiy Rayon is gaining more and more adherents (this experience was treated in detail in the third issue of the journal SELSKOYE KHOZYAYSTVO BELORUSSII for 1989). As you know this farm established a system of production and service cooperatives working on the basis of long-term lease contracts. The cooperatives have been granted economic and managerial independence and the kolkhoz was essentially turned into a cooperative of cooperatives. This model is now being applied by 72 kolkhozes and sovkhoses in the republic.

New forms of management and cost accounting relations are actively being introduced in Drogichinskiy, Berestovitskiy, Dokshitskiy, Petrikovskiy, Klet'skiy, Shklovskiy and other rayons.

The kolkhozes Progress in Klet'skiy Rayon, imeni Ya. Kupala in Orshanskiy Rayon, imeni Bogushevich in Oshmyanskiy Rayon, imeni Chkalov in Soligorskiy Rayon, Lyubishchitsy in Ivatsevichskiy Rayon, Pobeda in Dobrushskiy Rayon, Gorodets Sovkhoz in Shklovskiy Rayon and a large number of other farms can serve as examples of the efficient use of leasing relationships.

Practice shows that where they are serious about introducing leasing relationships and where they guarantee the material interest of collectives in the achievement of good final results labor productivity and profit increase more rapidly and the production cost of output declines.

The experience of Lyubishchitsy Kolkhoz in Ivatsevichskiy Rayon is instructive in this connection. They introduced the lease contract here in 1987. The annual milk yield per cow increased by 621 kg and amounted to 3,636 kg. The production cost of a quintal of milk declined from 27.01 rubles to 22.8 rubles (by 15.6 percent), the weight gain of cattle fell from 219.12 to 214.1 rubles (2.3 percent), and the weight gain of hogs declined from 413.75 to 265.50 rubles (by 35.8 percent). The profitability of animal husbandry reached 67.1 percent. The weather conditions in 1988 were unfavorable for this kolkhoz and therefore the harvest of grain and potatoes was significantly less than in 1987. But the gross production of milk increased by 25 percent and the weight gain of young cattle increased by 7 percent and that of hogs by 47 percent. The production cost of output declined.

Still, despite the fact that a certain amount of experience has been gained in the organization of leasing relationships and despite the organizational work that has been done, leasing relationships did not develop properly in all branches of the agroindustrial complex and are not yet giving the desired yield. Despite the generally positive financial results in 1988, expenditures per 1,000 rubles of gross output at the farms of the republic increased by 90 rubles in comparison with 1987, or by a total of 316 million rubles; there was no noticeable increase in labor productivity.

Before revealing the reasons for the low efficiency of the lease contract, I want to say this. People have recently started to come out in the press accusing specialists at farms and regional agroindustrial associations of the slow introduction of this new and more progressive form of management, saying that they are not interested in it and are hindering its development. This is not so, in the first place because the transfer of farm subdivisions to leasing relationships ensures (if it is done properly) better final production results and the material stimulation of farm specialists and managers at all levels of the agroindustrial complex is linked with final results. Secondly, they are even more closely tied to the final results of the work of the branches of the agroindustrial complex as consumers, for what is on the store counters will be the level of satisfaction of their needs.

Why is the development of leasing relationships in the branches of the agroindustrial complex proceeding so slowly?

Many specialists note that they are being restrained by the lack of a Law on Leasing. Of course the fact that the legal side of leasing relationships has not been determined juridically does curb their development but this is not the main reason, because leasing relationships without defining the legal side but in their normal organization do not contradict the laws on the state enterprise (association) and cooperation. As to why leasing relationships are developing slowly, it is necessary first of all to indicate the low level of skills of cooperative workers and their inability to make use of the advantages that leasing provides them as a new form of management. And therefore the training of personnel is the primary link in the acceleration of the development of leasing relationships.

For this purpose, a school for lessees has been organized in the department for raising qualifications at the Belorussian Agricultural Academy to train managers of leasing collectives of kolkhozes and sovkhozes. The training takes place separately from production and lasts up to 3 months. In the process of the training, the students study the theory and practice of intraorganizational accounting and leasing and cooperative relationships, labor and economic legislation and intensive technologies—in short, everything that is needed today for the successful work of the manager of a leasing collective. In April of 1989, the school graduated the first group of 78 lessees under the Belorussian Agricultural Academy.

The students in the first run approved this form of training. The results of the training are illuminated in more detail in No 79 of SELSKAYA GAZETA for 5 April 1989 in the article "How and What Should the Lessee Be Taught?" It is important that the instruction in leasing forms of management is conducted at a higher level and has been put on a stable basis.

The second weak link causing leasing relationships not to be assimilated fast enough is the low level of scientific support of economic estimates, their poor methodological base and the lack of well-founded standards. Today the instructional materials on the lease contract developed by research institutions and recommended for practical use do not permit economists of farms and enterprises to determine methodologically correctly intraorganizational cost-accounting prices or the size of the rent. There are cases here in the republic in which leasing relationships between collectives of lessees and farms are suspended in the course of the year because of the low level of economic estimates.

The third very important reason that is holding back the development of leasing forms of management is the extremely poor material and technical supply.

It is no secret for anyone that the transition to the lease contract raises the responsibility of labor collectives for final results and strengthens labor discipline. But the poor material and technical supply frequently negates all the efforts of the lease collectives.

The lack of highly productive, dependable and economical equipment along the entire technological chain in the cultivation of agricultural crops under intensive technologies and of the means of small-scale mechanization, spare parts and other resources does not permit a lowering of the intensiveness of labor and a dramatic improvement of its productivity to obtain better final results in production.

In summarizing what was said above, I want to stress that the lease contract must not be seen as some kind of separate form of the organization and remuneration of labor. It is essentially a form of management requiring the comprehensive resolution and improvement of the questions of planning, accounting, financing, payment, pricing and material and technical supply. All of us, all managers and specialists must organize our work on the basis of this principle.

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Advantages, Contradictions in Leasing Arrangements

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No 10, Oct 89, No 11, Nov 89

[Article by N. Borisenko, deputy director for science of VNIIPiN of VASKhNIL, doctor of economic sciences]

and professor, and A. Borisenko, senior scientific associate and candidate of economic sciences]

[No 10, Oct 89, pp 4-8]

[Text]

Increasing Fertility

Experience shows that cost accounting (khozaschet) is effective in agriculture when the results of the activity of collectives are economically interrelated with an assessment of the quality of the land assigned them and optimum supply of equipment and other production resources. These requirements are best met by collectives working under leasing arrangements. There is a myth about cost accounting and its effectiveness because its principal resources are not involved simultaneously in production.

It is generally known that all these elements of production have been reduced to three factors: labor, total productive capital (fixed capital, working capital, and nonproduction assets), and land. If the land and total productive capital are given in an unchanged amount and inputs of labor will rise, then the first additions of labor will raise productivity. A further increase of labor will yield commensurably less and less growth of output as the effectiveness of the inputs simultaneously decreases. The share of the influence on the productivity of every factor will vary directly with its scarcity relative to other factors, but it also depends on internal characteristics (the age and skill of personnel, the structure of capital and the wear on capital assets, the quality of the land, and so on).

Given a certain availability of land and supply of total capital, productivity and remuneration of labor will depend on the intensity and quality of labor. In this case, the payoff from capital investments will vary directly depending on the level of refinement of the organization of production and the use of labor.

It is clear that if the supply of capital and labor resources is the same, the productivity of land from one tract to another will vary, and remuneration of labor will depend on its quality. In agriculture, a sizable portion of gross income depends on natural and climatic conditions. In political economy, that share of income is called rent (reward for the natural "inexhaustible" properties of the soil). It should not include that portion of income which is committed to restoring fertility, combating erosion, building manure storage facilities, depreciation, repair of irrigation and drainage installations, and so on.

In many cases, outlays for land resource improvement are inseparable from the land. For example, planting a forest in the sand in order to stabilize it. The value of the land increases as the forest grows. Every ruble invested to bring a system of gullies and ravines under cultivation yields 4 rubles of profit. But there are also other cases. The soils of the "Gigant" Sovkhoz in Rostov Oblast, which was created in 1927, contained 6.8 percent

humus, while in 1988 the figure was only 3.2 percent. Losses of fertility are observed in all zones of the country. It is sufficient to say that since the time when V.V. Dokuchayev conducted his surveys (and that is 100 years ago) the fertility of chernozems in the south of Russia has dropped to half of what it was.

Accordingly, the corresponding portion of income realized by the farm must be committed first to increasing soil fertility, and it should not be included in the indicator of final economic performance. These outlays must be made every year (together with capital investments) from all sources, regardless of the existence of "own" resources for financing, and the use and state of fertility of farmland should be monitored to that end.

Cases are observed in which the lessees try to invest as little as possible in the land and take from it as much as possible. When the land is leased, then, improvement of the land's fertility should be established as a requirement (some farms are now stipulating that 10-20 tons of manure or other organic fertilizers be applied annually per hectare of plowland).

For how long a term should land be leased? The longer the term, the better. But in real life, situations differ. We will give data, then, from a legal calendar published in 1925. "Leasing means renting land for a term not to exceed one crop rotation or 3 years if there is no crop rotation; in exceptional cases, with permission of the ispolkom, for a term of two crop rotations or for a period of 6 years if there is no crop rotation."

Depending on the conditions of the various natural and climatic zones, the leasing of land may be "straightforward": for a definite term by agreement and on the basis of a lease. Small parcels of land not in crop rotation are leased on the basis of the lessee paying a certain sum for their use. For example, a hectare of plowland is leased to a cooperative to raise young trees. After 2 years, 100,000 of them are sold at 2.5 rubles apiece. The cooperative has realized 200,000 rubles of profit. Its distribution between the lessor and the lessee must be strictly according to a contract and must take into account expenditures of labor and resources. The outlays necessary to restore the fertility of the land leased must not be forgotten either.

That type of lease may be short-term: for a year, 2 years, or 5 years in any regions of the country. But land may be assigned to private farms for a term of 50-100 years as well as indefinitely. Conditions of this kind arise in the problematical mountain regions of the Northern Caucasus. This lease can be called "straightforward." In the central oblasts of Russia, in our view, one should take a comprehensive approach to this question. It is clear that here, as in no other region, there is a need to raise the level of production efficiency.

Private farms can be a great help in this regard. But something else cannot be forgotten: kolkhozes and sovkhozes have a high level of supply of machines and tractors, while the level of their supply of labor resources

is low. The question arises, then: By creating private farms, setting aside the best tracts of land for them, are we not condemning the remaining productive capital to idleness and neglecting land that is not as good in quality? After all, it is no secret: it is the healthiest segment of the workers who go off to become private farmers. It is also they who will take the highly productive land. But what is to be done with the other land and the capital assets for which there is no need? We feel that creation of farms of this type is an extreme measure in the country's central regions. In our view, the optimum mode of operation is for subdivisions to operate on a lease that takes into account the application of calculated prices for the products produced between the lessor and the lessee.

Creation of commune agriculture and the German settlements on the poor land in the south of Russia in the 19th century had to be accompanied by an improvement in soil and crop practices. There were five crops in their crop rotation, and the principal place was given to valuable varieties of wheat. Cultivation of the land was brought to the level of perfection. But as for improving soil fertility, the answer of the colonist-lessee was this: "It is more profitable for me to put less into my plot of land and to take out as much as possible." That explains the plunderous system of land use which brought the tracts of many colonists to the point of utter depletion.

The khutors, which had a large role in the development of this region's peasantry, were true oases in the southern steppes. The rise in the productivity of the land in the period 1880-1900, then, was related to the advantage of khutor farming. The land was transformed by becoming property; the peasant began to drain the wet places and bogs and to increase the fertility of the soil.

China's experience is of some interest in this regard. Over the last 8 years, the world press has carried reports about the dynamic development of agricultural production in the CPR. The grain harvest grew 1.5-fold between 1978 and 1984, reaching 407 million tons. These results are attributed to use of the family and specialized contract that made it possible to increase motivation based on the end result. The economic mechanism displaced administrativism in rural areas. For example, the "scissors" between profitable and unprofitable crops is regulated by means of prices, taxes, credit, and long-term loans. "Once settlement is made under the contract with the state, surpluses can be sold on the market at free prices."

But in recent years the yield of agricultural crops has begun to drop. Nor was this because of weather conditions. The family contract helped to lift agriculture out of its slump, but it is also holding back the creation of large stable farms in rural areas. After all, the family contract in China signifies intensification of manual labor, although in the new organization of work many people had high earnings (fourfold greater than others) and were able to acquire equipment, fertilizers, and so on. As shown by a survey conducted by the newspaper ZEFAN

RIBAO, 79 percent of the peasants in the suburbs of Shanghai who had been receiving high income intended to lead the peasantry, put their money in the bank, and live on the proceeds. Why is that? The land was leased for a term of 15 years. They had squeezed from it everything that was possible and then some. The peasant did not want to spend his own resources to increase its fertility, since he did not know whether he would have the land after that. Many peasants "left farming without leaving the village."

The fate of China's agriculture and the family contract as its principal organizational structure cannot but disturb society. To what is the family contract, which is the basis for operation of 95 percent of the households, leading? One possibility is that of the private farm: large family farms. The second is merging land contracts, various forms of cooperation. "Analyzing the second alternative," I. Laptev, V. Romanyuk, and Yu. Savenkov wrote in an article entitled "China: The Strategies of Reform," published in PRAVDA on 18 January 1987, "the specialists are putting emphasis on the voluntary principle—cooperation from above only frightens the masses, in whose memory recollections of the miseries of artificial 'communization' are still fresh."

But the figures given above on Chinese reality indicate something else. The people made available in the agricultural sector represent a mixture of social consequences and their labor has to be used locally. Creation of various production operations requiring the use of painstaking manual labor smooths out the adverse processes that are engendered. In this way, the slogan is implemented: "When you leave the land, do not leave your native region."

Another example. The humus layer is the basis of soil fertility. In the GDR, it is considered mandatory for all farms to maintain a positive balance of it on plowland. For several years now, annual production and financial plans of agricultural enterprises there have called for measures to increase the humus content in soils through systematic application of organic fertilizers, by plowing under stubble, ground-up straw, and green manure. When plowland is given an abundant application of organic matter and the amount of humus in the soil is increased, the application of manufactured fertilizers also increases as the amount of them administered decreases. Combined application of organic and manufactured fertilizers substantially improves the yield.

In socialist production, in our view, the payments made under the lease must coincide with what is referred to in political economy as "rent," unless there are improvements made on the land. If improvements have been made, the payment under the lease must correspond to the sum of the "rent" and depreciation and a certain percentage for use of the capital assets for improvement of the land, since the latter are not absorbed by the land.

Some lessees forget that the land's natural characteristics are highly exhaustible when the land is not treated

properly, and that its blunderous use can reduce the natural fertility of the soil and detract from those characteristics for a lengthy period of time.

The Price of Land and the "Rent"

By "rent" we mean that portion of the total income which is attributable to the land after deduction of all of its elements which can be singled out and related to capital investments pertaining to the land. It can be determined by multiplying the annual income by the "coefficient of capital intensiveness." The latter represents a percentage (which we consider normal) of the capital investments in the land. If we assume that 1 percent is acceptable, then the annual income should be multiplied by 100. Consequently, a hectare of land yielding 50 rubles of "rent" per year must be assessed at 5,000 rubles. In highly intensive natural and economic zones where the level of supply of fixed capital is high, farms have a low output-capital ratio, a low level of profit per unit of productive capital and the land, which raises land prices. But if a zone has a low level of production, where capital investments require a long pay-off period because of comparatively high production cost, and consequently the low profit, then this tends to reduce the price of the land.

It is clear that capital investments must be aimed at deriving a certain percentage of profit over and above the coefficient of capital intensiveness, which in the latter case will be low. Profit planned from capital investments is determined by the rate of payoff of the capital thanks to the additional output produced, plus something "for the risk." If there is no risk, the percentage of the deduction from profit for the return on capital investments will be lower.

It is evident from the examples that in setting the rate of a tax or the charge on land a minimum level must be set, just as is the case for profit derived (it should be differentiated). Income from land also depends on the annual growth of its value.

Land is mobile and can be taxed with charges, can be leased, and so on.

The levels of "rent" payments are also an issue for socialist agricultural enterprises. The theory of maximum productivity runs like this: the larger the proportion in which a specific factor is applied to production relative to other factors, the less income will be derived because of it.

In our country's agriculture, attention was not paid to the importance of determining "rent" following the October Revolution. In densely settled regions, the gross income derived was entirely attributed to the results of inputs of labor and the supply of fixed productive capital. Yet the influence on it of the quality of the soil and meteorological conditions should be considered important. But there are also differences in the quality of land assigned to subdivisions within the economic entity. There are kolkhozes and sovkhoses located in the

Upper Don whose plowland has more than 10 soil varieties that differ greatly in their productivity. It is clear that the results of the economic activity of the collectives will differ, and consequently "rent" payments, just like the rent of these plots of land will differ. Assuming intensive economic exploitation, the yield is determined to a considerable degree by the quality of varieties planted, by the amount of fertilizer applied (especially organic fertilizer), by the quality of fieldwork, and by the influence of weather conditions. Income must be determined not according to the amount of land, but according to its productive forces.

Pieces of land differ from one another in the natural properties of the soil and in their relief. That is why the "rent" should also be higher on more fertile soils, where a greater gross income is derived with comparatively equal inputs of resources. But it should be borne in mind that the fertility of the soil may differ as a function of the way it is used. There may also be differences in the conditions for the marketing of products on the market (the demand depends on the rural population, which meets its needs from its own farming operations, and the demand of the population of industrial centers). Thus, the prices of farm products will be higher in the latter case. They depend on location of the land relative to cities and transportation connections. Levels of the "rent" depend on these factors. There is a definite correlation between the level of prices of products and the "rent" in physical terms: at lower prices that do not correspond to the socially necessary expenditures, it is not possible to use many types of intensification (preparation and application of fertilizer, full mechanization of the branches, product storage, and so on), which detracts from production intensiveness and the amount of profit.

The level of the "rent" varies as a function of the fertility of the plots of land and their location. So that differentiated prices of products have to be set so as to take into account the specific character of the natural and economic conditions of production. This is possible if a private farm is created on land distant from large tracts—in forests, in the mountains, in the gullied steppe, and so on. For example, in recent years inhabitants have begun to return to the mountainous areas of the Northern Caucasus, where at one time there were auls. They will take loans, fix up housing, acquire livestock and equipment. The mix of products they produce will be influenced by conditions on the market, and this will largely determine the specialization of these farms.

After the October Revolution, the issues of leasing were widely discussed; they wondered if they should determine the income of lessees after deduction of the "rent" and a percentage from profit or whether it made sense to take these elements into account only for a capitalist farm?

The payment of taxes on land must also conform to the principles of differential "rent." This method has proved effective for a lengthy period of time in the GDR. For

instance, the Karl Marx Farming Cooperative in Gera Bezirk pays the state a tax of 470 marks per hectare of plowland. The level of the tax was established on the basis of the fertility of the soil, not on assessment of the gross output, which depends on the efficiency in raising particular crops.

But there are farms located in the suburbs of Berlin where the soil is worse. They pay 100 marks or are exempted from the tax altogether.

The Interests of Lessees and Farms

Expanding leasing relations on kolkhozes and sovkhoses has intensified the division of products into "profitable" and "unprofitable." Certain lessees are trying to insist on their right to cut back the planting of some crops in order to expand others, to the detriment of those which have been recommended, but which are not subject to delivery and have not been envisaged for delivery to the state by enterprises in the contracts comprising the state order. The main objective of such collectives is to derive maximum profit regardless of whether the needs of society are met. Is that proper?

Before and after the war, the assignment of tractor and fieldwork teams covering the entire crop rotation was an important achievement in agriculture. The land had a master in the person of the production collective.

But then the position of more output at any price emerged and began to prevail. Plantings of highly intensive varieties expanded, rates of application of manufactured fertilizers, chemical poisons, and so on, increased, remuneration of labor was no longer related to the end results of production, the issuance of products to producers was almost entirely stopped, and this resulted in the loss of the personal subsidiary farming operation.

The more intensive cultivation of the land almost everywhere favored a considerable rise in the productivity of plowland, in spite of the unreasonable measures that resulted in undesirable consequences: loss of the humus layer, erosion of the soil by wind and water, and so on. Nor was it any wonder. After all, the application of manufactured fertilizers dropped almost to the minimum, green manure was almost forgotten, plantings of perennial grasses were reduced, protective forest belts were cut in order to enlarge fields for crop rotation, and the stubble was at best harvested, or else it was simply burned.

The population of the areas of the Upper Don abandoned a sizable number of khutors. The land located around them had to be attached to those production subdivisions which remained in the other settlements. This resulted in an increase in the area of plowland of brigades and departments, and that meant a greater load on the peasant. This problem could be solved if there were incentives to work related to the increase in the amount of work to be done. In some places, the best machine operators left these brigades, including those working under a collective contract. The reason was the

leveling of the remuneration of labor because the advance paid on labor was based everywhere on time worked. In subdivisions which had 3,000 hectares of plowland or more, farmed by a brigade of 20-30 people, payment of the advance by the hour, even when it exceeded the full pay, took away from experienced machine operators an interest in the results of their work.

Practical operating experience shows that in such large brigades it is advisable to pay the advance on the basis of fulfillment of quota-shifts. In small brigades on the order of 6-8 persons, growing rice, say, when they are assigned a crop rotation on an area of 400 hectares, payment of the advance on an hourly basis justified itself. Here, the work is done on a high agrotechnical level and promptly on time because the workers check their own work, and that is why there was no need to keep records on quota-shifts. But in regular fieldwork the brigade was assigned crop rotation on an area of 1,200-1,400 hectares for a lengthy time. The question of breaking up the large subdivisions within the farm was frequently raised as a consequence.

Is this always advisable? On the Kolkhoz imeni Kirov in Peschanokopskiy Rayon of Rostov Oblast, they deemed it necessary to cut the size of field brigades in half. They said that there are many farms of that size in the Ukraine. Here, it is necessary to take into account the intensiveness, the population density, the location of villages, and many other factors that meet the requirements as to the size of Ukrainian farms. Reducing the size of the brigade results in the construction of new field camps, petroleum storage facilities, and other additional costs. That is why many factors have to be taken into account when these measures are approached, and attention must be paid first of all to improving specialization within the branch, to production technology, to on-farm roads and communications, and so on.

More than 20 years ago, scientists of the Northern Caucasus Branch of the VNIESKh [All-Union Scientific Research Institute of Agricultural Economics] worked out for the Kolkhoz imeni Lenin in Zernogradskiy Rayon, which has almost 30,000 hectares of plowland, a structure of the farm's subdivisions, a combination of branches, and the organization and remuneration of work. All this was accepted by the kolkhoz except the size of the brigade working under the contract. At that time, they proposed that the brigades be assigned 1,200-1,400 hectares of plowland, they would have 7-8 tractors and machines to go with them, and the brigade itself would consist of 14-16 people.

According to the calculations, these subdivisions were optimal and met the requirements for manageability, optimum use of land and equipment, and one of the main conditions—that was the size that the crop rotation had to be. The kolkhoz board refused to reduce the size of the brigades. Whatever projects the scientists devised against the kolkhoz's economic failure, they did not work out and stood as a reproach against "project planning."

Over all these years, the size of the subdivisions remained unchanged, between 3,500 and 6,000 hectares of plowland, and remuneration continued to be made for the final results of their production, and the advance was paid according to fulfillment of quota-shifts adjusted for the quality of the work. What is more, every such brigade had 15-30 tractors and almost the same number of machine operators. In the other case, there is no allocation after the pattern of "my tractor." If necessary, other tractor operators would use the tractor regardless of its assignment, thereby guaranteeing its use on two and three shifts. This makes it possible to sharply reduce the time allowed to do the operations called for, to increase the intensiveness of equipment use, to reduce the amount of equipment, and this helps to increase the productivity of fields and livestock-raising operations and to reduce the production cost.

Sure enough, 2 years ago, as soon as they began to introduce on the farm a rigid system of on-farm settlements, along with determination of the cost of the products produced in the subdivisions and more rigid incentives based on resource conservation, it became necessary to take away from the brigades the powerful and expensive K-700 tractors, which were not being fully loaded, and this had a considerable impact on the production cost (by way of depreciation). What is more, according to the calculations of scientific research institutes specializing in mechanization, if these machines are to be fully used, they have to have attachments running to dozens of machines. Using the energy-intensive K-700 tractors, the kolkhoz created two specialized subdivisions for preparation of fertilizers based on manure and ground-up stubble, which they would cart into the field and then plow under. These fertility detachments were also made responsible for plowing the soil and taking care of plowland. This eliminated the problem of unsatisfactory use of tractors: the downtime of these machines was minimized, and this reduced the strain on performance of work and tended to increase the yield from the fields. Remuneration of the machine operators in these subdivisions was related to the end results of production activity of those whose fields they worked. The result was this: fertility of the soil was not only preserved, but increased because the humus layer was replenished.

The responsibility for applying fertilizers to the field, which was placed on Selkhozkhimiya, is becoming unnecessary as time passes. That is the prospect for the future. The specialists of the farms themselves have a clearer idea where, in what field, how much, what types, and in what manner fertilizers should be applied. It is considerably cheaper to do the work with your own people, and the quality with which it is done is higher than when the services of Selkhozkhimiya are used. The most important factor here is the preparation of organic and combined fertilizers on the farms themselves. The thrifty approach to the technology of fertilizer application, selection of the optimum amounts and mix of fertilizer undoubtedly increase the fertility of the land.

Creation of the specialized subdivisions on the kolkhoz has made it possible to reduce the application of manufactured fertilizers from 6,800 to 4,000 tons and to increase the application of organic fertilizers from 30,000 to 300,000 tons. Each hectare receives 11 tons of organic fertilizer, and this makes it possible not only to improve the fertility of the soil, but also to considerably reduce expenditures to purchase, transport, and apply manufactured fertilizers.

How do they prepare organic fertilizers before they apply them to the soil? The stable manure is composted, brought to proper condition, and immediately plowed under after it has been uniformly spread in the fields.

The collective of the livestock-raising operation is usually assigned buildings, animals, and machines and equipment. As for supplying feed to the animals, the concept that has prevailed here is "what is left from cropping." In a sensible combination of the branches (extensive farming), use of the land must be subordinated to production of the principal product in view of the farm's specialization. If it is specialized in growing grain, then in the breakdown of the area planted grain crops must have a scientifically sound share and the necessary predecessors that are conducive to optimum use of plowland and to the achievement of stable yields of the principal crops. Under these conditions, the predecessors are feed crops—perennial grasses, corn for silage, root crops, and others, but in order to increase profit they may also be industrial crops: castor plants, sunflowers, and so on.

The size of the animal herd, in view of its productivity, should be calculated against the feed obtained from fields in crop rotation, plus the use of waste. Mixed feeds and premixes for feed mixtures ought to be the regulator of nutritious feeding according to the required standards. Unless the animals are fed a scientifically sound ration, how can one talk about the efficiency of the branch?

What we have said above provides the answer as to whether the lessee can dispose of the land and other means of production any way he likes, without taking into account the interests of the entire production operation? It is clear that the lease will not yield the benefit it should under these conditions, and that is equally the case of selection work, full mechanization, and progressive forms of the organization of production and work.

Creation of specialized half-growth groups of livestock in livestock operations is conducive to high efficiency of the leasing contract under the conditions of intensification of production. It is indispensable here to have sound economic relations between the lessee collectives. The subdivision for production of animal feed, say, must provide its products to livestock-raising operations in the required assortment, up to a certain level of quality, and at the established contract prices.

Not only the product's production, but also its use, is important here. The croppers who are putting by the

animal feed, for instance, must have a 2-year stock of feed. The livestock raisers pay them for the feed consumed during the year, but the rest has to be kept on their balance sheet as a reserve. It is no secret that until recently a 2-year stock of feed was a heavy burden on the production cost of animal husbandry. The trouble is that the stacking was done without shaping the top of the rick properly, so that it got wet in rainy weather, and as a rule the feed was almost entirely spoiled by the first spring. Even then they did not write it off immediately. The ricks stood all summer, taking up plowland in the fields, and the farm suffered a loss because of the reduced area planted. Only at the end of the year was this feed written off against the product produced. And this increased its production cost and detracted from production efficiency.

With the introduction of leasing, relations are improving between the subdivisions on the farm and the farm's management and also with the trade network and processing enterprises.

The fixed capital of farms, as experience shows, must be assigned to the collectives of brigades, livestock operations, and links in view of the production technologies and cost-accounting (*khozraschetnyy*) targets. The sum total of depreciation and deductions for major overhauls and current repairs is determined from the data of the subdivisions, and within them it is charged to the product produced in a breakdown by types of fixed capital (tractors, combines, buildings, installations). This makes it possible to compute the production cost and profit in every subdivision and to involve collectives in the fight for better use of fixed capital and physical, financial, and labor resources, which helps to raise production efficiency. The depreciation of fixed capital not involved in production is calculated for the farm as a whole. All of this is conducive to optimum development of the farm's material and technical base.

The state order should not be planned freely, but so as to take into account the interests of the consumer. Counting up the product's production costs by the so-called "boiler method" is unacceptable for that purpose. This must be done separately for each crop, it is even desirable to do it for each field, livestock operation, group of livestock, each of which should have its own master. This kind of effort affords the possibility of taking into account untapped potential for increasing output and reducing production costs.

The leasing of dairy cows should take into account the most effective length of time for their use, and here the basic things are the annual milk production and the profit obtained from its sale. Consideration should be given to the value of the calf, the manure, and also sale of the animal for meat. The value of the calf should be determined not on the basis of 150 liters of milk, as has been established, but consideration should be given to feeding the cow for 2 months during the precalving and colostrum period, keeping the calf with the cow for 10-20 days, and then profitability at the rate of 35-40 percent of those costs.

But there are cases (along with an increase in optimum use of the means of production when collectives are working under a leasing contract) when full output is not achieved because the adequacy of equipment drops because less money has been spent on it. For example, one collective in Tatsinskiy Rayon in Rostov Oblast, which made the conversion to leasing, took only three combines in order to cut costs instead of the four combines necessary to bring in the harvest within the time required by proper soil and crop practices. This increased the length of the harvest by more than 10 days. The losses of grain were approximately 10-25 percent in certain fields (more than 40 tons). The lessees themselves lost 3,500 rubles, and costs were reduced by only 600 rubles by eliminating the fourth combine.

The experience of collectives working under a leasing arrangement shows that for certain crops which have a comparatively low yield, such as legumes, for example, it is advisable to boost the accounting prices. They should be regulators, in our view, of production efficiency, eliminating the concepts of "profitable" and "unprofitable" products.

But along with a simultaneous increase in the amount of work and a reduction in the adequacy of the stock of machines and tractors of the subdivisions, sometimes the particular machines acquired are not the best ones. In the same rayon, lessee collectives began to ask for sprayers regardless of the size of the area (planted) assigned to them. But does every cooperative leasing land have to have its own sprayer and similar equipment? After all, the needs for particular machines and implements are episodic. They will increase the unproductive portion of past labor and the production cost. That is why such equipment should be in the machine yards of the farms, and when necessary they should be rented out for the brigades to use.

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[Text]

Who Is Disturbed by Income

On the "Pamyat Ilich" Kolkhoz in Tatsinskiy Rayon of Rostov Oblast, a lessee has leased 15 head of cattle. The terms of the contract were simple: the lessee would provide the building to house the livestock, and the kolkhoz would provide the bulls, the feed, and the medicines. After fattening, the animals are sold to the farm at the purchase price. Out of the amount received, deductions are made for the original value of the animals, the feed consumed, services, and the rest goes to the lessee. Is this proper? And where is the money to come from for the expanded reproduction of the kolkhoz, for development of social benefits, and so on? What remains to it after mutual settlements of this kind? After all, most of these issues arise where livestock-raising complex operations are empty, where there is a shortage of feed. And at first it seems that the opponents are right: feed put by for socialized livestock raising is

taken away from it and given out to the lessees. It seems that income is being siphoned from the farm into the pocket of the private farmer. There is some truth in that. But it is only partly true. There has to be a rise in the level of raising feed and it has to be supplied to both types of economic operation, just as now there is a sharp rise in output. What is more, capital investments are not needed for additional output.

In the first case, when the farm with a certain indirect loss to itself shares its profit with the lessee, a certain dual benefit is achieved. The need of the workers for urbanization disappears, the personnel problem disappears, and on the other side there is a rise in the level of remuneration of work, greater interest in living on the farm permanently, and so on. It is well-known, after all, that when society is rich, so is the state. And there is no doubt that the peasant's yen for "his own" homestead is also developing here. The latter is beyond all price when it comes to holding people on the land.

The extraordinary prohibitive measures in rural localities have had the result that inhabitants there have lost interest in familiar places. The director of the Don "Gigant" Sovkhoz gave a ton of grain to every worker (unlawfully, of course) even in the years of the stagnation. "If you do not give it to them for their homestead, they will take it themselves. Or quit. After all, they have to live on something," he said.

It is clear that the disputes that arise between the lessees and enterprise managers when they are agreeing on accounting prices for products have fundamental importance to the one side as a personal interest and to the other side as a public interest. If the accounting prices are higher, there is a considerable potential for having a large amount of saving on resources by reducing costs, and that amount would then go for material incentives. Planning the size of output as a function of the yield achieved, the productivity of livestock, and so on, has considerable importance in these relations. For the reasons mentioned above, these figures are equally unacceptable when they are too high and too low.

The question of using the output the lessee has produced over and above the plan is not a simple one. What is to be done with it? Some recommendations argue that the entire output the lessees have achieved belongs to them, and they would be free to dispose of it themselves, all the way to unrestricted sale on any markets where they can sell it. Others assume that only a fourth of it would go back to the hands of the lessee under those conditions. Still others argue that the lessee must not sell these products on the market himself.

The grain, and sometimes there are 20 or more tons per worker, still has to be sold somehow. Although many lessees leave 2 or 3 tons for their own homestead, they sell the rest to the state at a certain price—the purchase price or the accounting price.

Matters are somewhat more complicated when this principle is followed with the sale of fruit. The lessees

experience particular difficulties when the rayon procurement people cannot accept their products. Then they themselves have to go looking for places to sell them, transport, and so on. That takes time and money. It also means troubles in delivering the fruit to distant sales areas. And is this the producer's business anyway?

And what is to happen to vegetables produced over and above the plan, which often the farms plow under? And what to do with milk, meat, and wool? Will the worker haul his produce to the market? After all, he ought to be in the field and working with his livestock. There are still those who think: he must sell it to the farm at the purchase price. But is this right? Many people say that output realized over and above the plan, except for a certain portion necessary to supply the personal homesteads of the lessees, should be sold to the state at accounting prices fixed in advance, and these prices, as is well-known, must level out the concepts of "profitable" and "unprofitable" products. For example, on the suburban "Progress" Sovkhoz, located near Taganrog, soybeans are grown on 170 hectares. In 1988, the yield was 18.2 quintals per hectare, and almost 200,000 rubles went into the sovkhoz's cash drawer from their sale. That is, every hectare yielded 150 rubles of profit. That is the same profit derived from selling 180 quintals of tomatoes, whose price does not exceed 10 kopecks per kilogram. Every hectare planted to vegetables is being farmed at a loss and is absorbing almost 2,000 rubles of subsidies. The profit realized from selling wheat to the state is 60-80 rubles per hectare, which means that it is less than half of that for soybeans.

But the inputs of labor to raise a hectare of tomatoes can be furnished only if three workers are available year-round, whereas the same number is required for all 170 hectares of soybeans. It is also important that after the soybeans are harvested almost 25 tons of organic matter rich in nitrogen is left on every hectare of soil.

Or a second example. Last year was not a good year for watermelons. But 70 hectares yielded the farm 45,000 rubles of profit, that is, more than 600 rubles from every hectare. In other years, this figure goes higher than 1,000 rubles. These two products could substantially increase the profitability of the sovkhoz's agricultural production. But shaping the interests of the farm must be linked to the interests of the state. And it is one thing to replace one product in the state order by another product from the standpoint of the farm's marketing situation, and something else to do this out of mutual interest. For instance, in order to increase the production of soybeans, it would be possible under certain conditions to cut back on the grain from cereal crops. Yet it has not always been possible to increase profit by reducing the delivery of tomatoes under the state order because of the excessive development of melongrowing in the suburbs.

Substitution of red cabbage for some of the white cabbage makes it possible to increase profit from the production of vegetables. On "Progress," planting 10 hectares of red cabbage instead of white cabbage reduced the

output by 15 percent, since the yield is lower, but the profit from its sale increased almost sevenfold and reached 20,000 rubles.

It is altogether justified to find a place for crops that simultaneously guarantee fulfillment of plans for deliveries under the state order and increase the profitability of the branches.

Progressive accounting prices that gave kolkhoz members an incentive to increase production of products and to improve their quality have been in effect for many years on the Kolkhoz imeni Lenin in Zernogradskiy Rayon. They are in fact the principal factor in the financial motivation of the cost-accounting subdivisions of the farm with respect to the end results of their work.

Integral Relations

Industrial enterprises are developing patronage relations with kolkhozes and sovkhozes as one of the forms of integral relations between the city and the agroindustrial complex. Workers of the plants and factories undertake to produce various products under contract conditions. Leasing is also being introduced. For example, the Taganrog Metallurgical Plant is leasing 2,000 hectares of plowland from the "Sovetinskiy" Sovkhoz. Under the conditions of the lease, the sovkhoz is paid in kind at the rate of 30 feed units from every hectare of land; that is, as much as was assumed in the farm's plan, and the rest goes to supply the workers of the plant.

Agricultural workers are more and more frequently exchanging output over and above the plan with steel industry workers and with miners. But even here there are paradoxes. A dropoff in sales is observed. The reason is the absence of elementary linkage between production plans and sales plans. For example, farms in Salskiy Rayon planned to produce 13,000 tons of tomatoes in 1988 and to sell 3,000 tons to the state. What to do with the rest? And it is not surprising at all that some of the fields were left unharvested, just as in previous years.

The slow rates of growth of livestock herds on the private farm represent a serious shortcoming with respect to increasing milk production in the oblast.

The agroindustrial complex is also suffering substantial losses because of dislocations in the operation of rail transport and confusion in planning the steady delivery of refrigerated cars for shipment of the products of animal husbandry. For instance, in August 1988 the farms in Salskiy Rayon were unable to ship ducks and mutton to industrial centers because the refrigerated cars that arrived were intended only for beef.

Nor can one take an indiscriminate approach to the sale of animals in certain weight categories to meat combines. After all, there are animals that do not meet the standards, and there, of course, must be an exception in this case. Otherwise, there can be no question at all of

any waste-free production. That is why the farms must have a right to ship a certain portion of below-standard livestock for processing.

There is nothing surprising about the fact that the peasant is cautious about acquiring the powerful "Don-1500" combine. After all, to obtain it the farm must sell 700 tons of tomatoes that would take up at least 25 hectares of land. It will take 3,000 people to harvest that crop. And when you take into account that the combine must be purchased for "own" funds that go for expanded reproduction, and those funds are based on a certain share of profit, a sizable amount of the funds derived from the results of production activity would go to acquire this equipment. And here we should also take into account the insufficient reliability of the "Dons" plus their high downtime for technical reasons. Although on the basis of the advertising data this machine has high parameters, the quality of the workmanship is not what it ought to be.

In recent years, bad things have begun to crop up in the attitude toward the land. In some places, they have tried to pay members of unofficial work brigades for their work with land. Last year, the "Pravda" Kolkhoz in Radionovo-Nesvetayskiy Rayon concluded a contract with a brigade of "newcomers" to raise mangel wurzel on 50 hectares. In order to remunerate them for their work, the managers of the farm set aside 5 hectares of plowland where they would raise watermelons. Obviously, the brigade paid its principal attention to the production and sale of the early watermelons they had received, and the mangel wurzel was choked with weeds.

Productivity is also low on the subsidiary farms of industrial enterprises, which along the Don occupy more than 80,000 hectares of land. That is as much plowland as farms in Kagalnitskiy Rayon have. But whereas the average yield in that rayon is 32 quintals per hectare, it is 16 for the subsidiary farmers. And the production cost of the grain in the latter case is half again as much.

Almost everywhere machine operators operating on cost accounting have begun to avoid the services of repair and technical enterprises (the former Selkhoztekhnika), where the quality of workmanship is not what it should be. They believe it is far more effective to do the repairs and to service the equipment themselves. But they need replacement parts and materials. This holds back the performance of operations by the personnel of enterprises operating under leasing arrangements and contracts.

The approach is the same to the use of brigades of construction workers on farms. Not so long ago they dictated to the animal husbandrymen and field cropping people their own terms for doing current and major repairs on buildings and installations. What is more, the quality of workmanship was not always good. With the transition of the subdivisions to leasing, the collectives have taken this over themselves. Many people are requesting only materials in order to do repairs themselves. It is always possible, for instance, for the worker

on a livestock farm to find an hour or 2 in his workday. Herdsmen can find still more. This has forced construction brigades to make the transition to cooperative structures and to take on that work which they previously avoided—the building and finishing of residential buildings, and so on. Thus, leasing has helped to make available a sizable amount of labor resources on the farms themselves, and those resources are being used there for work which hired brigades previously did.

It is generally known that 1 million tons of meat are lost just in transporting livestock between agricultural enterprises and meat combines. After all, it would be more advisable to locate meat combines of optimum size right at the places where the products of animal husbandry are produced than to have giant meat combines located tens and hundreds of kilometers away.

It is expensive to ship feed grain to elevators from remote sheep-raising regions, frequently over distances of 150-200 km on bad roads, but the paradoxical thing is that almost all of that grain that has been carried goes back again to those farms, though now the quality is only worse. The shipping costs per ton of grain that is carried were 3 rubles in 1988, and it cost 5 rubles to carry the mixed feeds. It is sufficient to say that in certain years it cost those regions more than 100 rubles to carry a ton of feed 1,000 km. This is clearly one of the reasons why the efficiency of sheep raising is dropping.

This is why the problems of optimally combining branches so as to take into account specialization of zones and regions must be the basis for the long-range development of agricultural enterprises and for strengthening the effectiveness of cost accounting, as well as for the location of enterprises to process and store the product and to fulfill state orders for product deliveries to union and republic stocks.

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REGIONAL DEVELOPMENT

Estonian Agrarian Situation Examined

Supreme Soviet Decree

904B0085A Tallinn SOVETSKAYA ESTONIYA in Russian 18 Nov 89 p 1

[Decree of the ESSR Supreme Soviet issued in Tallinn 12 November 1989 and signed by A. Ryuytel, chairman, and A. Almann, secretary, of the ESSR Supreme Soviet Presidium: "On the Inquiry of the Group of Farmer-Deputies of the ESSR Supreme Soviet to the ESSR Council of Ministers on the Problems of Agricultural Economics"]

[Text] Having heard the inquiry of Yulo Niysuke, chairman of the group of farmer-deputies of the ESSR Supreme Soviet, and the answer of Gustav Tynspoyeg, first deputy chairman of the ESSR Council of Ministers,

the Supreme Soviet of the Estonian Soviet Socialist Republic decrees as follows:

1. To take note of the information provided by Gustav Tynspoyeg, first deputy chairman of the ESSR Council of Ministers.

2. To order the ESSR Council of Ministers to continue the work of setting on agricultural products new and economically sound purchase prices and to adopt additional measures to improve the financial and economic position of all subdivisions of agricultural production.

In the session this December, the ESSR Supreme Soviet is to be informed about progress in carrying out the decree.

Deputies' Inquiries

904B0085B Tallinn SOVETSKAYA ESTONIYA in Russian 18 Nov 89 p 2

[Inquiries of Yu. Niysuke, chairman of the deputy group, and deputy R. Kaydla]

[Text]

Chairman of the Deputy Group Yu. Niysuke:

Since we need bread and the other products that come from agriculture, and since that need will continue tomorrow and the day after that, our deputy group has submitted an inquiry on the problems of agricultural economics. We know that prices are in the stage of being set, but unfortunately the farmer does not know the final decisions. The Estonian farmer has never bought a pig in a poke, nor does he wish to now, in a period when it is time to start concluding contracts for fulfillment of state orders.

The farmworker cannot plan if he does not have even an approximate idea of his financial and economic position, if he does not know what he can sell to the state, what he can sell on the free market, and in what quantities. Some examples characterizing the situation in financial economics over the last 2 years. Since last year, the expenditures of our agriculture have risen 20.9 million rubles for peat, 17.1 million for fertilizer, and 14.7 million rubles for machines. Prices have also risen unexpectedly on mixed feeds, which represents an additional 73 million rubles for the year. Which yields an impressive sum—125 million rubles. Then, let us add the rise in prices of building materials and construction. Which is why we submitted our inquiry to the ESSR Council of Ministers.

Over the first 9 months of this year, the serious financial and economic situation in the republic's agriculture has worsened. The question of compensation for the rise in mixed feed prices has still not been settled. The price and tax policy which has been shaped and which according to original projections was to take effect only on 1 January 1990 is unclear. The Estonian Agricultural Alliance has asked the ESSR Council of Ministers to present by 1

September 1989 prices for the sale of basic supplies, machines, and energy necessary for production; the bases and scales for remuneration of agricultural producers and service personnel; and the draft of new purchase prices of agricultural products. But still nothing is clear on these matters. This kind of situation detracts from the activity of all producers—private farmers, kolkhozes, and state enterprises. At the same time, a decree of the republic's council of ministers has prohibited the sale of farm products outside ESSR, where payment would be made on negotiated prices.

State plans, the budget, and state orders for 1990 are about to be debated. The group of farmer-deputies of the ESSR Supreme Soviet calls upon the ESSR Council of Ministers to set forth in the next section a clear-cut position and the strategies and dates for solving the problems we have raised.

I would like to present some other points of view of our group. The Estonian farmworker has always been honorable in his dealings with other contracting parties. Hereafter, we would like contracts to be concluded and commodity exchange to take place on equivalent principles, which would cover the expenses necessary for natural conservation and to guarantee normal rural life. Unless we solve the problems in the area of social welfare, then rural areas will not awaken to a new life. We have a duty to supply foodstuffs to the rural and urban population, but I feel that in performing those duties we must retain the right to establish direct ties and sell products on the free market.

I would like to conclude with words spoken to me yesterday by an elderly man who has been a farmworker for a long time: If the parliament and government and the bodies of local self-government cannot solve the problems of supplying food, the people will not have confidence in them.

Deputy R. Kaydla:

The difficult political struggle is lifting our spirits and giving us strength. I think that the inquiry that has been submitted is not a reproach of our agricultural leaders, but rather a sign that our farmers, who are now taking an active part in political life, are, as in the past, filled with desire and strength to concern themselves with economic matters, especially those of agricultural economics. They have followed the drafting of the new laws with intense interest and are very much motivated to take a far more active part in this effort.

Provision has to be made so that it does not turn out with application of the new law on prices that state purchase prices are set on most agricultural products, but what are referred to as formed prices will apply to those commodities which farmers are forced to buy for production—agricultural machines, mixed feeds, fertilizer, building materials, and so on. The draft law on prices submitted for first reading to the Supreme Soviet does not spell things out. It seems to me that it gives too broad powers to the republic's Council of Ministers and to the planned

State Price Service in the setting of prices. The same thing could also happen with the law on taxes. It is evident that all deputies need to think seriously about how to keep the setting of prices and taxes in the hands of the Supreme Soviet.

State purchase prices now in effect on milk, meat, grain, and so on, do not guarantee reproduction in agriculture, much less expanded reproduction. Thus, they do not afford the possibility of rebuilding the villages or developing those that exist. It can, of course, be said that agricultural production has had rather high profitability by comparison with industry. But, unlike industry, money circulates slowly in agriculture. For example, before planting rye this fall, we first plow the land, prepare it, fertilize it, plant the seed, and pay wages. That is, we have spent money which we will receive only in a year, when we begin to harvest the crop. So that we also receive the profit later. Whereas in raising rye the turnover cycle is 1 year, it is still longer in beef production. High profitability still does not signify anything in and of itself, since because of the low speed of the circulation of money the amount of profit is still small. I think that all this should be taken into account when the new sales prices and rates of remuneration of agricultural enterprises are set.

Peasants are now seeking opportunities to set up subsidiary enterprises to produce goods which up to now have mainly been produced in the city (chemical products, electronic equipment, and so on). This is being done in order to obtain more money, since the rate of circulation in the production of industrial goods is, of course, considerably faster. Thus, the production of farm products could become a secondary task for rural areas. Unfortunately, that is what it is already coming to in some places. That is why the new purchase prices of farm products must unconditionally be such as to stimulate production of precisely those products and rural development. Fair prices can be set only in collaboration with farmers, and this needs to be done following thorough environmental analysis. I think that the discussion today has demonstrated that farmers and their deputies are ready to fight for their interests through the Supreme Soviet.

Chairman's Reply to Inquiries

904B0085C Tallinn SOVETSKAYA ESTONIYA in
Russian 18 Nov 89 p 2

[Response to the farmer inquiries by G. Tynspoyeg, first deputy chairman of the ESSR Council of Ministers and chairman of ESSR Gosagroprom]

[Text] I want to confirm from the very outset that the republic's government and Gosagroprom perceive the need for sound recovery of rural life in exactly the same way as the deputies who submitted the inquiry. That recovery can be achieved with interrelated measures. Rural development in the broad sense depends on the producer's motivation, the volume of production and its

profitability—on whether they allow achievement of development of that production and that social infrastructure which would in turn guarantee improvement of peasant life. It is certain that in recent years production costs have risen mainly because of the rise of prices of equipment and raw materials. Procurement prices have remained at the same level for years. That is why the profit from production of agricultural products has declined and on the whole there has been less profit per production unit. For example, over the period 1980-1985 the profitability of production in agriculture was 35 percent, over the period 1986-1987 it was 31.5 percent, and last year it was 30.9 percent. Calculations show that this year profitability is approximately 30 percent. This is giving rise to many unsolved problems which will not tolerate further delay. They have to be solved at once.

Profit depends on production, its volume, and purchase prices, but also on enterprise. In recent years, because of the emergence of new forms of ownership and organization of work, a growth of enterprise has been observed. The government has been trying to ensure all forms of enterprise equal economic conditions, and to a certain degree it has managed to do this, but perhaps not fully and not everywhere. But every day the new forms are being given more and more room even in agriculture, and they have already become an inseparable part of rural life. We do have private farms (khutorskiye khozyaystva), partnerships (tovarishchestva), cooperatives, joint stock companies, kolkhozes, and sovkhozes. We are convinced that the need for different forms will increase still more.

The results in cropping have been considerably better on most farms this year than last year. The anticipated gross grain harvest will be more than 900,000 tons dry weight. This will make it possible to allocate threefold more grain to feed livestock than in 1988. The grain yield on kolkhozes and sovkhozes was 20.35 quintals dry weight per hectare. In many rayons and on many farms, they had a record harvest this year. This indicates the potential for development of agriculture. Our varieties produce a decent harvest on Estonian soil when raised by skillful and industrial people.

About 720,000 tons of coarse and succulent feeds have been put by in terms of fodder units; this falls short of the result in 1987. Compared to last year, the animal feed grown and put by was almost 9 percent more. Unfortunately, fires have now destroyed more than 4,500 tons of hay, above all in Yygevaskiy Rayon. This resulted from arson. This matter is now in the hands of law enforcement agencies and procurators. We felt it necessary to discuss it in a session of the Council of Ministers.

Livestock procurements are up 2 percent this year, milk procurements are down 2 percent, but the net result for the volume of production has increased. At this point, it would be quite logical to assume that profit must also rise accordingly. Unfortunately, this has not occurred.

What is the real situation? I will give some examples from which everyone will be able to draw his own conclusion.

Last year, our kolkhozes, sovkhozes, and interfarm enterprises realized more than 400 million rubles of profit. Profitability, as I have already noted, was 31 percent. But now, although farms and interfarm enterprises have fulfilled the profit plan for the first 9 months, it is 21 million rubles, or 8.6 percent, less than last year. Which leads to the conclusion: the volume of production has risen 7 percent, and profit has dropped 8.6 percent.

This year, profit in our agriculture is planned at 343 million rubles, which is 14 percent less than last year. A forecast shows that many farms will end this difficult year with a loss unless we take decisive steps. As I have already noted, profit has dropped because of higher production costs. As we know, the production cost depends on many factors. They also include the remuneration of work. We all encounter the rise of prices every day, and in this situation I consider it normal and justified for the wages of agricultural workers to be raised this year. Quite a bit has already been said about the main reasons for the decline of profit. This year is the first time in the Soviet Union that the rise in prices of a particular type of agricultural raw material has not been compensated. This is unfair to the farmer, and in this respect the opinion of the Council of Ministers is no different from that of the farmers themselves.

Taking into account the situation that has come about, the republic's government, on recommendation of the APK, has been seeking an opportunity to increase appropriations from the state budget to cover the plan of capital investments, to allocate from the budget 8.6 million rubles to cover the difference in prices of mixed feeds for farms operating under difficult conditions. In addition, 2 million rubles have been allocated this year from the budget to finance construction of housing and social welfare projects, 2 million to support private farmers, and another 3.6 million rubles for additional working capital out of centralized funds. Thus, 14.2 million rubles have been allocated from the republic budget.

Peasants are disturbed about vagueness on the question of the new procurement prices. With respect to fruit and vegetables, there is already a solution: negotiated prices will take effect as of 1 January. Ceiling prices on fruit and vegetables will be introduced together with the Farm Alliance and regional organizations of private farmers. To be sure, the problem of new purchase prices of the products of animal husbandry (pork, milk, and mutton) has not been solved. The draft decree of the USSR Council of Ministers entitled "On New State Purchase Prices of Agricultural Products" is based on the present base purchase prices and price supplements now in effect. We have now been sent the third version of this decree of the Council of Ministers, which we received in mid-October. Although purchase prices will rise according to the draft, this will not offset the rise of

production costs and will not guarantee the necessary profitability. It would signify a drop in profitability in our agriculture.

Gosagroprom specialists have explained our situation in Moscow repeatedly. We have submitted additional calculations on the production costs formed in the coming year, taking into account the rise in allocations for social security in the state sector, the higher price of diesel fuel, higher transportation rates, and other services. They were accepted. We submitted the last such material last week to USSR Goskomtsen and the first deputy chairman of the USSR Council of Ministers. In the early days of November, I and A. Vyali, secretary of the Estonian CP Central Committee, again met with the secretary of the CPSU Central Committee and on that occasion we demanded and protected our rights. We are firmly convinced that the purchase prices must provide good coverage not only for development of expanded reproduction, production, and the social infrastructure, but also the use of a civilized technology that contributes to natural conservation. We explained this point of view, substantiated it, and submitted specific petitions in the form of prices. The reaction was not negative, they listened to our additional information, and in spite of the difficult financial situation for the state, they promised us to help as much as they could. At the same time, I want to call the attention of the deputies to the fact that the USSR budget has been adopted and it does not envisage new purchase prices and the relevant expenditures.

As already noted, the purchase prices of milk, swine, and sheep are unacceptable to us. Whereas the purchase prices of swine in the second version of the draft decree are 2,980 rubles per ton live weight in Estonia, Latvia, and Lithuania, in the third version they are 2,410 rubles per ton in Estonia, but they remain the same as before in Latvia and Lithuania. In the draft decree, the purchase price of first-grade milk was 420 rubles per ton, which would afford only 24-percent profitability. The purchase price of sheep is projected at 3,760 rubles per ton, which under our conditions would reduce profitability to zero.

What we are working for is for Estonia to be assigned a purchase price of 470 rubles per ton for first-grade milk, 2,980 rubles for swine live weight, 5,100 rubles per ton for sheep live weight, and 3,980 rubles per ton of beef. Assuming those changes, the profitability from selling our agricultural products would reach 39-40 percent and would prove to be higher than in the 11th FYP and higher than in the last 2 years. At the prices we have proposed, profitability would be approximately 34 percent.

The question might arise as to why we are dealing with these problems in Moscow rather than in the republic? Theoretically, this is possible, but in practical terms it involves extremely great difficulties. The entire sum of the additional payment originating in the new prices amounts to 373 million rubles. At the prices we are now proposing, the sum of the supplement would be 202

million rubles; that is, there is a difference of 171 million, which represents approximately 15 percent of total expenditures in the republic's draft budget. But since expenditures for military purposes, armament, and so on, have not been envisaged in the republic budget, it is mainly a question of expenditures for development of the material-production base and especially the social base, that is, in practice, it is highly problematical.

By and large we receive raw materials and equipment from union enterprises. It would be logical for the amounts we are short to be offset in part at the expense of their profit.

We have once again demanded that compensation be made this year for the loss resulting from the rise in the price of mixed feeds. We have been promised that this question will be discussed once again. We have also learned that Goskomtsen has made calculations envisaging a partial compensation in the amount of 46 million rubles. But if the difference in prices is not offset, we will ask the republic government to allocate us an additional 15 million rubles from the budget this year. We have prepared a draft decree on this matter, and I hope that you will approve it.

UkSSR Politburo Member Critiques Reform Progress

904B0062A Kiev *SILSKI VISTI* in Ukrainian 19 Nov 89 pp 1-2

[Interview with I.G. Grintsov, member of the Politburo and Secretariat of the Central Committee of the Communist Party of the Ukraine: "On the Road to Perestroika: At the Turning Point"]

[Correspondent] First of all, Ivan Grigorovich, a question which is traditional for this season: how are the workers of the agroindustrial complex finishing the agricultural year? What is characteristic of it, from the point of view of the work of Party organizations?

[Grintsov] In spite of all difficulties, there has been a certain progress in the agroindustrial complex of our republic. With the change over to full economic accountability and cost recovery, there has been some improvement in the economy of the agro-industrial complex enterprises as well as some broadening of the opportunity for solving social problems. According to our preliminary calculations, agricultural production will grow. Collective and state farms will come to the end of the year without losses. We are expecting a record gross grain harvest—over 53 million tons. The yield capacity on the area of about 15 million hectares will come to 34.8 quintals per hectare. Collective and state farmers in Chernovtsy, Crimea, Kiev, Cherkassy, and Vinnitsa oblasts have harvested 38-43 quintals per hectare. The state order on the grain sale is secured, the demands of the people for bread, macaroni, and some cereals are satisfied.

There is some improvement in the situation with production of other kinds of crops. The productivity of potatoes amounts to 139 quintals per hectare, which is 48 quintals more than that of the last year. Plans for production and sales of sugar beets and sunflowers to the state are being fulfilled. It is expected that over 5 million tons of sugar and 950 thousand tons of sunflower oil will be produced, as planned.

However, the supply to the people of the necessary varieties of fruits and vegetables is somewhat worse than planned. The supply of the people with the products of animal husbandry remains a weak point; though the production is being increased and, in some regions, the supply has been somewhat improved, the demands of the people on the whole, especially for meat, still are not being satisfied. In view of this, measures are being taken for more effective utilization of feed, for successful wintering over of livestock, in order to ensure the increase in productivity thereof.

Creating proper conditions of daily life and work for agricultural workers is of major importance, because it will, first of all, determine the increase in livestock and other agricultural produce. I think it should be the main concern of the Party committees of oblasts, rayons, collective and state farms. It would be appropriate to emphasize that during the perestroika period, the Party committees should not weaken their positions but rather be in the first ranks when solving principal problems; they should work with the people and for the people. By avoiding direct interference with the control of the economy, they cannot free themselves of responsibility for the situation in the economy on the whole, and the solution of the food problem, in particular. After all, it concerns the vital interests of our people, and outside of these interests, the activity of the Party simply loses its meaning.

[Correspondent] Ivan Grigorovich, you have mentioned that the further intricate work with people, worrying about meeting their vital demands, is most important for the work of Party committees. In which areas does this particularly demonstrate itself?

[Grintsov] Concern about a person, an agricultural worker, a rural resident is, first of all, connected with the creation of the proper conditions of daily life. Directed toward the solution of this problem is the complex program of village reconstruction of the Ukrainian republic which was approved by the Politburo of the Central Committee of Ukraine in 1987. It was foreseen that to invest, over the course of 15 years, over 35 billion rubles in the improvement of social-cultural and public-living conditions of life of rural populations, to build 80 million square meters of dwellings with all the proper amenities, to erect, at an increasing rate, socially important buildings and engineering networks.

The concentration of the attention of the Party, state and economic authorities particularly on this important matter enabled us, during the current 5-year period, to

increase the annual pace of erecting dwellings by one-third; water supply systems—2.7 times; gas pipe systems—almost by twofold. The average annual amount of capital investment has increased 1.6 times, compared with the last 5 years.

However, no radical changes in this matter have yet taken place. We still need to do much to provide the villages with all the necessary public-living and social-cultural buildings and reliable roads, as well as to improve trade and services to the population.

In my official capacity and as a people's deputy, I deal very closely every day with these problems. The most acute of them is the installation of gas. Only 6% of the villages have gas networks. By this index, the Ukraine is lagging behind other republics, though it is far and wide crossed by powerful gas-pipes. To solve this problem, it is necessary to increase the rate of building gas networks by 2.5 - 3 times. And this, in turn, would necessitate an increase in the production of pipes. The Council of Ministers of the Ukrainian SSR has recently determined the targets, the fulfillment of which will enable us to solve more successfully this extremely urgent problem.

I would like to add something. The residential construction in villages is developing in a very complicated way. Shortage of building materials, such as bricks, timber, radiators, tiles, and cement, has increased significantly because of the growth of the horticultural and vegetable cooperatives. It is quite difficult for a person building his own house to receive a loan in a bank.

I would like to take the opportunity to explain something on this account. Since the beginning of the current five-year period, about 1.2 million garden plots were allocated for urban residents. Their development will demand as many materials as the building of 400 thousand village houses. Last year, urban residents received for the building of their greenhouses 1.7 times more money, in loans, than peasants received for the building of their dwellings. That resulted in the fact that last year only 27 thousand village houses were constructed, while during several previous years, 35-37 thousand houses were constructed in the villages annually.

At this point, it is important to share the difficulties between the residents of cities and villages. It is determined by the situation. In the coming years, in our republic, great increase is planned in the production of bricks, slate and other building materials, and the pressure of the problem will be reduced. Also the concern for people's well-being is, of course, in significant improvement of the conditions of work and in solving other social problems. We should work harder on these problems also.

Mass media, and the newspaper SILSKI VISTI, in particular, should more often and more profoundly discuss the process of restructuring in the countryside. They

should not only show the difficulties but leading experience, as well. In many oblasts, for instance in Lvov, Dnepropetrovsk, Sumy, and recently in Nikolayev and Kirovograd oblasts, the creation of proper living conditions for the countryside workers is being given great attention.

[Correspondent] The success in Agroindustrial Complexes is impossible without the qualitative renewal of countryside relations. How do these processes develop in our republic?

[Grintsov] The restructuring of socialist production relations in the countryside is the central point of the agricultural policy developed by the March (1989) Plenum of the Central Committee of the USSR. Neither capital investments nor modern technology will affect the food production area until the former economic mechanism is replaced. In order to fulfil this task, the Party organizations of the republic are eradicating the command style of the leadership and helping the personnel to master economic methods of management.

These efforts are directed, first of all, at the full and thorough realization of the potential abilities of collective and state farms, as well as of other enterprises of the agroindustrial complex, based on the transition to the full self-supporting and self-financing basis. Last year, agroindustrial complexes in Crimea, Ivano-Frankovsk, and Chernovtsy oblasts were working under these conditions and moved to a high level of production efficiency. This year the new principles are being introduced in all oblasts, which will make for a strengthened financial situation in the republic agroindustrial complex.

Another important direction of modernization of the production relations is the development of various forms of contract work and the principles of leasing, in particular. At present, they are being used in over 7 thousand farms and in one-third of all production subdivisions. Thirty percent of the arable land and one fifth of the cattle and poultry population has been turned over for lease. This contributes to the merging of the personal, collective, and social interests of the rural workers. However, there are many problems involved in this. The new laws about property, land, and lease relations, adopted by the Supreme Soviet of the USSR, will make a significant contribution to overcoming the difficulties.

Recently, some of the mass media have begun to discuss the future of the collective and state farms. Some writers even blame collective farms for all shortcomings in supplying the people with food products. It is those who are far removed from the basis, possibilities and daily life who come out against the collective farms.

It is true that there were some violations of the Leninist principles of cooperation, groundless forcing of collectivization, using violent methods, etc. But if we were to consider the collective farms as a cooperative form of management, we should state that no better organizational form has been invented in the world so far. Even in capitalist countries, all the farms unite into various

cooperatives, thus solving their own and state problems by joint efforts, on the basis of their economic interests.

This is the reason for the necessity to strengthen the collective farms, to give them full independence, and in every possible way to support their economic initiative. We would permit lease, farms, etc., but the large, highly mechanized farm, based on industrial technologies and on the modern scientific achievements, will remain the most significant agricultural structure.

To initiate the strengthening of collective and state-farms, especially weak ones, it is necessary to organize lease cooperatives within them. Useful experience in this area has been gained by the collective-farms "Leninska Iskra," Tysmenitsky rayon, Ivano-Frankovsk oblast, "Pravda," Baltsky rayon, Odessa oblast, "Zorya Kommunizmu," Krnichansky rayon, Dnepropetrovsk oblast, and many others. In 340 collective and state farms of the republic, over 2,000 leasing cooperatives are already at work.

We would support further development of integrated agroindustrial enterprises. In the republic, there are 42 agroindustrial combines, 30 agricultural associations, 46 agricultural firms, 40 agricultural consortiums, 18 agricultural and trade enterprises, and 280 scientific and production associations and systems. These are quite new forms of the economy, and it is difficult to tell which of them should be given priority. One should take into consideration all of the economic and natural conditions and traditions of each area. What to choose—this is up to the collective and state farms and up to the countryside workers.

[Correspondent] What prevents the economic development of the collective and state farms and other enterprises of the agroindustrial complex? How can we widen this "bottleneck"?

[Grintsov] As I have already mentioned, the economy of the enterprises and plants of the agroindustrial complex will be strengthened during this year. The number of low-profit enterprises will decrease significantly. However, in the future the situation may become more complicated. Continuous increases of wholesale prices for industrial goods and raw materials used by the collective and state farms, is not compensated for by the growth of purchase prices for agricultural products.

This problem is extremely important. It implies social justice in the countryside. I hope the government of the republic and the republic Gosagroprom will take this into account, as the republic turns toward economic independence and economic accountability, and that they will do everything possible to avoid such a distortion. The Union authorities should also pay attention to these problems and solve them in a positive way. The problems were brought up in the letter of the rural workers in Paviogradskiy rayon, Dnepropetrovsk oblast, published in the newspaper PRAVDA on October 8, 1989.

At the same time, there are many reserves for strengthening the economy within the enterprises and farms themselves. First of all, there should be a concern about raising the level of management in over 5,000 collective and state farms, where last year the profitability was less than 25%. Under the new conditions, they will not be able to increase reproduction on their own.

Furthermore, every year 200-300 collective and state farms suffer losses from the sale of grain; about 1,000 farms—from the sale of sugar-beets; almost every third—from the sale of potatoes and beef, every second—from the sale of vegetables. Around the whole republic, hog and sheep raising are unprofitable. At the same time, these branches are highly profitable in many other enterprises. Local agroindustrial units should hence investigate the reasons for the unprofitability or low profitability, and to assist enterprises in increasing efficiency in all kinds of production, with no exceptions.

Derzhagroprom and especially its local divisions should do everything possible to assist in the adoption of full economic accountability on all enterprises, in order that each of them can grow on the basis of its own income. Is it possible to resign oneself to the fact that last year 94% of subdivisions were working on the self-supporting basis and almost half of them overspent their funds? This is evidence of a bureaucratic attitude to economic accountability.

[Correspondent] What do you consider the most effective methods of quickly satisfying the public's needs for food?

[Grintsov] In order to solve this complicated problem, it is necessary to do goal-oriented work in many directions. Further increase of agricultural produce as well as increase of stability in the development of crop growing and animal husbandry have been and still remain the most important tasks. Agricultural scientists and republic specialists have worked out general directives (concepts) for the development of crop and grain growing, animal husbandry and feed production for the next years and the more distant future. I cannot say this versatile work has been fully completed, but the general principles of the intensification of these branches has been already elaborated. Now we need to bring them to the notice of those who will carry them out and begin their implementation. However, this is the most difficult task. At this point, Party committees and our personnel should demonstrate their organizational abilities.

Among the most urgent measures for increasing the food supply, I should mention the increase in the stability of the fundamental branch—crop farming. The only way to reach this goal, as one can judge by the experience of our country and foreign countries, is by the increase of the fertility of soils and in the adoption of intensive technologies. The development of such technologies in grain production, for instance, gave the opportunity to receive 12-15 additional quintals per hectare. This year, eleven oblasts of the republic and a great majority of the collective and state farms have threshed over 35 centners

of early grains per hectare, the greatest amount of threshed grain being received in the Bukovina, Cherkasy, and Kiev regions.

At present, in half of the areas sown, grains are being cultivated in keeping with modern technologies. Their inculcation in all areas will enable us to receive an additional 8-10 million tons of grain. Intensive technologies should be given priority for increasing production of sugar beets, oil-producing crops, feed, vegetables, etc.

The solution of the grain problem is impossible without further increase of the production of corn and other crops with high protein content. This problem was a subject of a discussion at a recent republic conference in the agrofirm "Zorya" in Rovno oblast. Appropriate tasks were set before the Party and state bodies, machine builders, and scientists for supplying the farms with all that they need to attain high corn yields.

As for the meat, milk, and other livestock products, it is necessary, for accelerating the increase in their production, to solve, in the first place, the problem of feed. Technical re-equipment for feed production—establishing a proper base for preserving feed and preparing it for use—are measures that should be given the greatest attention. According to scientific data, at present, almost one-third of the feed is being expended in vain because of the protein deficit, which amounts to at least 20-25%. The methods for solving this problem in our republic have already been defined; it is necessary now only to rapidly put them into practice, especially in increasing cultivating soy-beans, turnips, peas, sunflowers, lupines, and other high-protein crops.

Along with this, persistent efforts should be directed toward increasing the genetic potential of the herd and to the introduction of modern methods of keeping animals. Specialists, scientists and production workers should work hard for the sharp increase in the production of pork and poultry. Something has already been done for this. For instance, republic scientific and production system "Svinina" has begun to work; organizations are being formed, with the participation of scientists and machine-builders, for solving problems in potato-growing, vegetable-growing, and in the production of corn for grain. These and other important problems of rapidly achieving scientific and technical progress in the agroindustrial complex will be discussed at the coming joint conference of the Commission of the Central Committee of the Ukraine for the problems of the agroindustrial complex and of the presidium of the Southern division of the All-Union Agricultural Academy.

I would like to add the following. The struggle against crop and produce losses is one of the main directions in the increase of food production. Here are the results of

the analysis made by the scientists of the republic: annual losses of grain amount to 16%, of sunflowers—27%, of sugar-beets—22%,—one third of the vegetable and potato crops. The total value of the agricultural produce which does not reach the consumer numbers 5.7 billion rubles, or 17% of its total amount.

Minimizing these losses will enable us to significantly augment food resources. Farmers have great hopes that agricultural machine-building plants will improve the quality and reliability of the machinery. The plant "Kievtraktorodetal," production associations "Umanfermmash," "Agromash," and some others have already made some progress in this direction.

In the solution of the food problem, it is very important to build an appropriate basis for the processing industry and preserving the produce. Over a billion rubles were allotted for this purpose this year, a one-third part more than last year.

The situation is, so far, the following: the republic produces annually 24 million tons of milk, that is, as much as Bulgaria, GDR, Czechoslovakia, Romania, and Hungary, all together, but there is a shortage of dairy products on the store shelves. The reason is that, because of low processing capacity, only half of the milk is being processed, the rest being directed to the animal farms in the form of butter milk and whey.

The development of the processing basis, the utilization of scientific and technical progress, will enable us to increase significantly the variety of food. There is much work to be done.

That is why the development of food and processing enterprises, especially in the places of the production of raw materials, and their technical re-equipment should be the center of attention of the agroindustrial bodies. Much depends on the understanding of the problem by local Party and state authorities, and of their utilization of available intellectual and industrial potential.

[Correspondent] What is your opinion as to the role which agricultural specialists can play in solving the urgent food problems?

[Grintsov] Their role is, no doubt, great, although I cannot say it has ever been of minor importance. Professional, energetic, resourceful specialists, who are dedicated to their work, are capable of solving any difficult problems under actual production conditions.

At the same time, the role of specialists from the republic Gosagroprom, from the oblast and rayon bodies, as well as from the enterprises themselves, at the present stage of our development, is treated in various ways. There is a point of view, that their number at enterprises should be significantly decreased, as well as the number of the graduates from the corresponding educational institutions. Advocates of such an approach say that, if properly stimulated, peasants would be able to solve their problems themselves.

I deeply believe that introduction of lease, economic accountability, and the transfer to other forms of management will have a definite effect. However, this is only one side of the problem. The rise in the scientific and technical level of agricultural production, and without it there is no sense in speaking about its intensification and the revival of the countryside, is impossible, as is verified by the experience of our country and foreign countries, without specialists and scientists.

Furthermore, without specialists, we will not be able at all to transfer the economy to economic accountability relations, and agricultural and processing enterprises to new conditions of management. Another matter, though, is that workers of the lease collectives would not seek the services of just any specialist. The competency of the specialist is what matters, first of all.

When new principles of management are being introduced, the role of the specialists is essentially being changed, as well. They should act as technologists, consultants, or experts, introducing new achievements of scientific and technical progress, helping in the realization of specific production tasks.

Up to now, the education of agricultural specialists has given preference to technological aspects, which has resulted in the fact that a great many of excellent agriculturists and zoological engineers cannot find a new approach to organizing their work under the conditions of economic relations. This is an obvious oversight. Besides technological background, a specialist should have a good understanding of management, economic and labor law, international relations, etc.

Higher and secondary technical schools should re-orientate their teaching programs, in order to direct to the countryside resourceful, highly-educated specialists, who would be able to work with people and would not be afraid of the responsibility of making deep changes in agricultural production.

Agriculture is now at its turning point. Some changes have already been made, but not as significant as we all would like and as perestroika demands. We ought to do everything to make the countryside workers feel genuine concern for themselves, and they will return in full.

[Correspondent] Ivan Grigorovich, you are still emphasizing the technological, practical aspects. But you are the Secretary of the Central Committee of the republic...

[Grintsov] I understand your hint. I do not think there is any contradiction. We were discussing living and working conditions, perspectives of work in agriculture, and personnel. But these aspects are of Party concern,

because for proper outlining of Party goals it is necessary to have a good understanding of technology, economy, and management. These were my guidelines. I believe if you are unable to foresee the results, you will not be able to be an organizer.

[Correspondent] And the last question, Ivan Grigorovich. What would you like to wish to the workers of the agroindustrial complex, on their professional day?

[Grintsov] In a few words, I would like to thank all the collective and state farmers, all those who work for food, processing, building, and other enterprises and organizations of the agroindustrial complex, all the leaders, specialists, and scientists for their dedicated work. I wish them productive achievements for the benefit of our people, and all the best in their preparation for the upcoming XXVIII Congress of the Communist Party of the USSR.

Greater Support Urged for Private Farming in Uzbekistan

Leader Urges Facilitation of Private Farming

904B0088A Tashkent SELSKAYA PRAVDA in Russian
5 Nov 89 p 7

[Article by I. Dzhurabekov, first deputy chairman of the Uzbek SSR Council of Ministers: "Private Farmsteads, Benefit to All"]

[Text] The provision of the population with food products of high quality and in sufficient quantity is a matter that can no longer be delayed. For many years we sought to develop the countryside and to increase agricultural production but we have not yet been able to achieve a dramatic improvement of the population's food supply. And the reason for this is that we did not decide to implement an idea that life itself persistently suggested—allocate land to kolkhoz members and sovkhoz workers and help them in the development of private plots.

Two months ago, the Central Committee of the Uzbek Communist Party, the Presidium of the Supreme Soviet and the Council of Ministers of the Uzbek SSR passed a decree "On the Further Development of the Private Plots of Kolkhoz Members, Sovkhoz Workers and Citizens and of Individual Housing Construction." It is linked with great hopes, for it is a very urgent matter involving everyone: food products.

The final result of the realization of the decree not only foresees a greater utilization of existing manpower reserves but also permits a substantial increase in food stocks. As of today, however, it does not meet basic per-capita consumption standards. The inefficient use of irrigated lands and the reduction of the role of private plots have led to a situation in which the provision of the republic's population with food is at a low level.

The complexity and scope of the set tasks are putting fundamentally new demands on soviet and economic bodies in the development of the individual sector of production. The past and even more so the present show what the peasant is capable of doing when he himself manages the land. There are numerous examples in which a private plot in skillful hands produces three or four times more output than in the public sector and yields a profit of 6,000 rubles or more, which does much to supplement the family budget.

Doubtless the increase in the size of private plots will help to increase the production of fruits and vegetables. The task is to utilize and preserve them more rationally. For this reason, soviet and economic bodies must show concern about expanding the procurement and marketing network and strengthening its material-technical base. This work has started. At the kolkhozes and sovkhozes, they are building small shops for the processing of output and storehouses and are expanding the network of procurement centers.

It is already necessary, without delay, for Uzbekbriyash and its local agencies to begin work with the individual sector. It is necessary to think through the system for the signing of contracts for the purchase of excess agricultural output at private farmsteads. It is also necessary to determine sites for the acceptance, storage and processing of output and to be bolder about taking such a step as the signing of contracts for the delivery of assorted vegetables and fruits by private farmsteads. And at the same time, there must be no pressure exerted if the owner of the farmstead keeps part of the produced output for his own needs.

Working commissions at the farms have established new standards for private plots taking specific conditions into account. A great deal of organizational work has to be done in the allotment of new plots to almost 390,000 families and in increasing them for 667,000 families. As of today, this work has begun in all oblasts. About 70,000 hectares of land have been allocated as private plots. More than 500,000 families received parcels of land after the decree was issued. There were 14,000 hectares of land allocated in Bukhara Oblast, 11,000 in Syrdarya Oblast, 7,000 in Karakalpakskaya ASSR, 5,000 in Samarkand Oblast, 3,500 in Hamangan Oblast and 3,000 hectares in Tashkent Oblast. This made it possible to increase from 45 to 73 percent the satisfaction of the needs of families for private plots.

In a number of rayons, however, there are cases of a formal approach to the fulfillment of the decree of the Uzbek Communist Party Central Committee, Presidium of the Supreme Soviet of the Uzbek SSR and Council of Ministers of the Uzbek SSR. Bayautskiy, Mirzachulskiy, Dustlikskiy, Nishanskiy, Guzarskiy and several other rayispolkoms did not consider certain tasks and the objective of the decree and did not take them to kolkhozes and sovkhozes. As a result of this, only 250 of 2,046 families in Chirakchinskiy Rayon needing private plots actually received them. Not a single family out of

1,275 in Nishanskiy Rayon was allotted a plot of land. Only a few of 180 needy members of Kolkhoz imeni K. Marx in Guzarskiy Rayon received plots.

In examining the applications for the allotment of parcels of land, the managers of kolkhozes and sovkhoses and village soviets of people's deputies often show indifference and insensitivity to the needs of the working people. Thus, 91 percent of the families in Dustlikskiy Rayon did not receive parcels of land. In Gulistanskiy Rayon, not a single family out of 2,900 wanting to expand their private plots was able to realize its wish. At Kolkhoz imeni Akhunbabayev in Syrdaryinskiy Rayon, 79 requests for the allotment of parcels of land were not met. The Komsomolabad Village Soviet in Mirzachulskiye Rayon did not consider 35 applications received after the issuance of the decree. These and other similar cases evoke the justifiable dissatisfaction of the working people and complicate the morale and psychological situation in the labor collectives. The grossest violations of the system for the examination of the applications of the working people are not being assessed as they should be by oblast, rayon and village soviets.

At times the private plots are not being provided with water, equipment and fodder in a timely manner and they do not organize the sale of seedlings of fruit trees and different kinds of livestock. For this reason, 20 percent of rural farmsteads do not have a single head of cattle. There is an especially large number of such farms in Tashkent, Andizhan, Bukhara, Fergana and Namangan oblasts. The situation is even more alarming with respect to cows and one-third of the farmsteads have none.

This is the result of the fact that the soviet and agricultural bodies have not done the proper organizational work for the sale of young livestock to the population. In due course the republic's Council of Ministers instructed all oblistpolkoms and the Council of Ministers of Karakalpakskaya ASSR to sell to the population 42,000 head of cattle, 46,000 hogs, 205,000 sheep and 10 million chicks from the kolkhozes and sovkhoses. But many soviet and economic workers are performing this work extremely unsatisfactorily. Only 12 percent of the calves were sold in Karakalpakskaya ASSR and Kashkadarya, Samarkand and Syrdarya oblasts. Not enough lambs, suckling pigs and chicks are being sold to the population.

The leadership of the republic understands that not every family is able to buy the necessary amount of livestock even if it wants to. One must look into the reason why the peasant cannot or does not want to keep livestock. The managers of kolkhozes and sovkhoses and the village soviets must organize things so that each farmstead can keep different kinds of livestock, especially cows, which will make it possible to improve significantly and diversify the family fodder ration. For this purpose it is necessary to show concern and provide material assistance to such families. In so doing, the farm will not lose even if the outstanding production workers and families with many children are given livestock free

of charge. When the peasant comes for help, he should be given a loan for the acquisition of livestock and one should see that it is used as designated. At the same time, one must also not forget about providing the peasant farmsteads with an adequate amount of inexpensive feed.

In allocating new parcels, it is necessary to consider the improvement of social and domestic conditions. It is a matter of allocating the new parcels in one block. The rayispolkoms must immediately take measures for the breakup of parcels and the formulation of a general building plan and must not violate it in the future. For the purpose of saving irrigated land, it is advisable to build in a compact manner. It is desirable to build the houses on two levels, making provision for water, sewage and gas mains. There are sufficient standardized projects and one can select them as desired.

In a number of oblasts, they have begun to apply a new form in the development of private plots—peasant farmer holdings. The essence of this form is that the kolkhoz or sovkhos allots the land under leasing conditions and the peasant holding acquires 10 to 15 or more cows. The produced output—meat and meat—is turned over to the farm at state prices in fulfillment of the plan. For the output the farm settles accounts with the farmers through concentrated feed, building materials and other supplies.

This form has become widespread in Bukhara, Samarkand and Tashkent Oblasts and Karakalpakskaya ASSR. There they have already organized more than 2,000 peasant holdings, where they keep more than 20,000 head of cattle. An especially large number of farmer holdings have been organized in Romitansky, Babken-skiy, Bukinskiy, Sverdlovskiy, Karakulskiy, Urgutskiy, Pskentskiy and Ishtykhanskiy rayons. Here the kolkhozes and sovkhoses sell to the holdings young cattle and poultry, provide them with transportation and veterinary services, allot the needed seed and land and issue loans.

As a result of the intensive development of individual farming in Karakulskiy Rayon in the last year and a half, the state has received more than 250 tons of meat and about 300 tons of milk. The purchase of output has been organized in other rayons as well.

The work done in the development of farmer holdings helps to increase the income of the population and also contributes to a fuller employment of all strata of agriculture. A large number of women have been involved in socially useful labor at farmer holdings and they are being issued labor books.

At the same time, it should be noted that in a number of rayons and oblasts the development of such holdings is being restrained because of the insufficient understanding of their essence by kolkhoz and sovkhos managers as well as the perception of the desire of citizens to increase the production of output as their striving to enrich themselves.

Extensive explanatory work is necessary among the rural population against the traditions of enclosing the farmstead by a huge wall and of building "fortresses" and a large number of sheds and other auxiliary structures. Everyone must give thought to taking a prudent attitude toward the irrigated fields, make rational use of them and produce the maximum possible amount of agricultural output.

In short, the work with private plots requires a new approach in the actions of soviet and economic bodies and here one must not allow any delay or pressure through force.

With the increase in the construction of housing, the problem of building materials arose. The allocated stocks do not cover the needs. But the managers of a number of farms are finding ways to come up with additional material resources. Let us take, for example, Besharyk Sovkhoz in Fergana Oblast and Kolkhoz imeni Narimanov in Khorezmskaya Oblast. Here they built brick plants in a short time and these farms have centers for concrete, carpentry shops and other enterprises fulfilling the orders of the population and a cooperative was established for the repair and construction of housing and water mains. The services to the population amount to several million rubles. Mutually advantageous contracts are signed with the timber management establishments of the RSFSR and organizations of other republics, where they obtain the necessary output and materials. Unfortunately, there are still few such enterprising farm managers.

But there are major tasks ahead of us in the construction of individual housing. To carry them out, it is necessary to utilize all local resources, of which there are enough in every rayon, kolkhoz and sovkhoz, and cooperate in the provision of mutually advantageous economic ties with other regions of the country.

All managers of oblast and rayon organizations, settlement and village soviets, and kolkhozes and sovkhozes should understand that the question of the development of private plots is not just the next campaign but specific measures to raise the well-being of the working people of Uzbekistan. The Central Committee of the Uzbek Communist Party and the government of the republic will not allow any retreat from what has been planned and will do everything possible to carry it out. And every peasant must be confident that the indispensable measures being taken will serve to improve the existing situation.

Fair Distribution of Land

904B0088B Moscow LITERATURNAYA GAZETA in Russian No 51, 20 Dec 89 p 12

[Article by Murad Mukhammad-Dost: "Land to the Peasants!"]

[Text] Henceforth every family living in a rural area will have personal use of up to 20-25 hundredths. This decision was made in Uzbekistan.

More than 2 million families live in the villages of Uzbekistan. Previously they gave up to 13 hundredths for a plot but even this meager standard was not observed—cotton literally grew right up to the peasant's yard. They actually gave 8 to 9 hundredths. Besides an orchard and a garden, there had to be room on them for a house (and sometimes two or three houses: for the sons).

Occupying just 3 percent of the arable land, private plots provide the republic one-third of the potatoes, about half of the meat, fruit and vegetables, more than 50 percent of the milk and wool, and 100 percent of silk cocoons.

But now imagine that they give the country 20 to 25 hundredths in the hands of the peasant. By the way, he does not waste anything, even apricot pits!

We now have cut back 300,000 hectares in cotton and 60,000 hectares in industrial crops. Part of the freed land will be given to the peasants. This step will doubtless diminish the social tension in the republic in connection with the low incomes of villagers and with the unemployment of part of the population.

These are good measures but.... The people must not be given the most "chemicalized" lands from the time of the predominance of cotton, otherwise we will receive a lot of toxic chemicals along with the fruits and vegetables.

And something else. Not all the land is the same. We need fairness in its distribution. We should never allow extortion but we have more than enough people in the middle level of the system who charge the peasants a pretty sum for good land. People's deputies, be vigilant!

LIVESTOCK AND FEED PROCUREMENT

Problems in Operating RSFSR Hog Complexes

Ivanovo Oblast Cited

904B0051A Moscow SVINOVODSTVO in Russian No 6, Nov-Dec 88 pp 2-4

[Article by L. Barinova: "Mistakes on the Road Toward Intensification"]

[Text] In speaking about hog-raising complexes we immediately imagine industrial enterprises that operate according to intensive technology, that plan supplies of full-value mixed feeds for animals, that use industrial cross-breeding or hybridization and the shop structure, that are characterized by production continuity and smoothness and the mechanization of labor-intensive processes. Failure to observe even one link in the common chain results in a violation of technology and in a considerable loss of production output. In printing this article, we begin a frank discussion about the work of hog

complexes and their needs. The editors ask representatives of agroproms [agroindustrial associations], directors, specialists and rank-and-file workers of complexes to participate most actively in discussing this subject in order to deal with problem areas and to better utilize the achievements of science and leading experience.

Ivanovo Oblast is one that receives subsidies of meat products from the republic fund. It was decided to build two hog complexes here in order to improve meat supplies to the population. Such enterprises receive feed centrally from state funds, which also seemed of no little importance.

Thus building began, and not haphazardly but using the method of people's construction. Every rayon sent its brigade of builders. Today one can see near pigpens and other subsidiary facilities spread-out bricks with the names of cities such as Vichuga, Furmanov, Shuya and so forth. People worked with enthusiasm, hoping that these complexes will help to eliminate the shortage in meat products—after all there is poultry in stores in a sufficient quantity and all because poultry factories were built.

In 1979 the Borovoye Hog Complex for 108,000 head was put into operation, and 3 years later—Vorozhino Sovkhoz for 54,000 head to be fattened annually. Before this a portion of small unprofitable hog farms was eliminated—now they were useless, an extra restraint.

Today almost 60 percent of the entire hog herd in Ivanovo Oblast is concentrated in these enterprises. We can see from the table, which presents the basic production indicators for complexes, that they still have not achieved their projected capacities even 6 and 9 years after the start-up of operations. Even though the enterprises are profitable they are not profitable enough to pay on schedule for construction. Borovoye still owes the state 24 million rubles and Vorozhino—15 million rubles.

What is the problem? Why is it that enterprises with industrial technology, utilizing the leading achievements of science and technology, in which everything is foreseen up to and including the average daily weight gain of hogs being fattened should have in order to produce the planned pork tonnage, cannot realize their program?

The achievement of planned capacities by hog complexes depends on many factors. In studying them it turned out that the most important factors were not being taken into account.

Let us begin with the plans. They do not include mixed feed plants, shops or feed storehouses. Also, the oblast has not had a plant that would be able to fully supply complexes with mixed feed in the needed recipes. What has this resulted in? Since they do not have their own plant they have been forced to seek help outside the oblast. For example, help was sought in Tula, which until

recently supplied complexes with mixed feed for suckling pigs, weaned pigs, gestating swine and so forth, whereas not a single oblast mixed feed plant produced such specialized feed.

As became clear during a discussion with V. V. Shalenkov, director of Vorozhino Complex, supplies of mixed feeds are not regular, it is necessary to feed hogs "from the ear of corn" until the analysis samples are returned from the laboratory, and there is no storage space anyway—the bunkers for loose feed are earmarked for short-term storage and this is why storage facilities are now being built in complexes. V. D. Denisov, director of Borovoye Hog Complex, noted that since 1985 the complex has been receiving 50 percent of the special feed it needs, which comes from Tula Oblast, and prior to this time things were even worse. The remaining 50 percent must be supplied by Ivanovo Oblast Administration of Grain Products. But the mixed feed that has been produced in the plants of Ivanovo Oblast (with the exception of the new one—Teykovskiy) often do not meet standards as concerns fineness of the grind, nutritive value, bacterial seeding and toxicity. In 1987, 30 percent of the mixed feed that arrived in Borovoye did not correspond to OST [Branch standard] requirements for many indicators. Moreover, the Administration of Grain Products did not conclude agreements on the production and delivery of mixed feeds. This is more convenient—there are no complaints, you take what they give you.

This year the situation involving mixed feed is changing for the better—the Teykovskiy Mixed Feed Plant has been put into operation; on its territory there is a shop for threshing barley and oats. By the end of the year it should reach its projected capacity—420 tons of mixed feeds per day.

Together with representatives of sovkhozes and the plant a schedule has been developed for delivering mixed feeds to enterprises. Contracts have been concluded, according to which when above-plan profits are achieved, 5 percent will be deducted for the plant. If supplies of mixed feed of the needed recipes are provided to complexes in an untimely manner the plant will bear the material responsibility and vice versa, if the mixed feed is not moved in a timely manner then the complexes are responsible.

In the plant the feed must be examined according to ten indicators, which is very important. These include size of threshing, moisture content, content of salt, calcium, phosphorus, raw protein, cellulose, fat and so forth.

But already today there are cases of uneven dispatch of mixed feed; the quality assessment does not follow all indicators. This is why the plant's collective, Ivanovo Oblast Administration of Grain Products and the oblast agroprom must make every effort to correct the aforementioned problems and to assimilate projected plant capacities as quickly as possible because since August 1988 the plant has been the main supplier for all types of mixed feed for the complexes of Ivanovo Oblast.

Although feed is the main factor that affects hog production there are others that are no less significant.

The building of complexes was done in haste. Often there were substitutions in building materials and their quality did not always correspond to that which was planned. This resulted in the fact that roofs and floors require immediate repairs. But complexes are poorly supplied with building materials (20 percent of demand). Even all materials that come to the oblast for agricultural building hardly suffice for the needs of one such enterprise. Due to the inadequacy of the airtightness of production capacities the heat regimen is violated. The air vents installed in the conduits for manure removal do not work and consequently the microclimate of the facilities does not correspond to zootechnical requirements.

Equipment is breaking down. Thus, in Borovoye it is essential to replace the pipe system for the distribution of liquid feeds and the system for the distribution of dry feeds, but there is no equipment. In Vorozhino feed pumps are breaking down, it is impossible to buy new ones and spare parts also do not exist. Already today Borovoye requires capital repairs. But what organization will take this on? The mobile mechanized column of Borovoye agropromstroy [Agroindustrial building association] cannot achieve the repair and building of the complex. The brigade of builders itself totals only 37 persons and is involved only in ongoing repairs.

At Vorozhino Hog Complex there is also a problem with water supply. It is essential to build a water line from the main water intake structures of the city of Shui because existing wells were to supply construction only. They were not planned for anything more and there is no guarantee that there will always be water here. Here we need effective help from the oblast agroprom and specifically from the building chairman, A. A. Khomyakov.

Before reaching the land belonging to Borovoye Complex one becomes acutely aware of a specific odor, yet quite nearby is a settlement. It turns out that production facilities were built in a low place although scientists of Ivanovo Agricultural Institute warned against this, about its consequences and about future difficulties with manure removal. Incidentally, the manure removal system in Borovoye Sovkhoz differs from the planned system—pipelines were placed 50 millimeters more closely together than necessary, which often results in their obstruction. It was necessary to build two additional conduits.

In Vorozhino Sovkhoz all is not well with manure removal as well—the conduits become obstructed, especially in winter, and there are no man holes—they were

not included in the project. The shop for the separation of fractions was built at the purification works, and practical experience shows that a more suitable location would have been the territory of the complex and to move the liquid fraction to purifying facilities.

A regular production pace also influences the obtaining of the end product. Here there is also something to think about. The removal of piglets from their mothers was planned for 26 days of age in complexes; this turned out to be unacceptable. First of all, there is not enough whole milk supplement and secondly the bodies of piglets after such early removal adapt poorly to environmental conditions and this is why there is such a great drop out of young animals. Today in complexes piglets are removed at the age of 30-35 days and consequently all of the planned technology is violated.

To reestablish the planned pace and the achievement of planned capacities we should increase production area. In 1985 the oblast executive committee passed a resolution about building additional and auxiliary buildings and structures and about allocating land for such building. Having not yet closed their accounts with the government, complexes are demanding new material expenditures.

Not everything is going well in enterprises in terms of adhering to veterinary requirements. Prophylactic breaks between the time an animal leaves a pigpen and another is placed in it are too short. Supplies of veterinary preparations to complexes are fraught with interruptions. Ivanovo zoovetsnab [Zooveterinary supply association] does not supply sufficient quantities of SZhK [serum of foaling mares], prolazan for synchronization of farrowing, iron preparations to prevent anemia and the vaccine for gastroenteritis. All of this is not conducive to the veterinary situation in enterprises. There is also a shortage of equipment for artificial insemination of hogs, of ear tags and even of stall boards for attaching the parent sow's cards.

The questions that have been raised do not exhaust all of the needs of complexes. This is all the more true since needs can be different in different enterprises. But the problems of feed and repairs are common ones; their solution depends on the agroproms of the RSFSR and the USSR.

Two large hog complexes built in Ivanovo Oblast produce significantly less pork than planned. The problem of supplying the population with meat has not been solved with their help. And with this kind of attitude it will take a long time to solve the problem.

Indicators	Hog Complexes			
	Borovoye		Vorozhino	
	1987	7 months of 1988	1987	7 months of 1988
Herd as of 1 Jan 88	77,859	-	35,500	-
Gross increase, tons	8,967	5,557	3,894	2,795
Average daily weight gain, grams	424	483	482	540
Piglets produced	100,877	64,422	53,304	34,414
Expenditures per quintal weight gain, quintals of feed units	5.96	5.1	5.9	5.0
Production cost of 1 quintal weight gain during fattening, rubles	114.36	106.47	182.87	110.00
Profits, thousands of rubles	6,535	-	1,709	-
Profitability, percent	41.0	-	20.0	-
Number of piglets per farrow:				
—Total	8.18	8.5	7.6	8.0
—From basic mother	8.45	9.5	8.4	8.8

Local, Regional Follow-up Commentaries

904B0051B Moscow SVINOVDSTVO in Russian No 6, Nov-Dec 89 pp 12-14

[Article by Yu. V. Gorbunov, First Deputy Director of the RSFSR Main Administration of the RSFSR Non-Chernozem Zone, and A. Babanov, Deputy Chairman of Ivanovo Oblast Agroprom: "Following a Journal Article"]

[Text] The sixth issue of our journal for 1988 included an article by L. Barinova entitled, "Mistakes on the Road Toward Intensification," which criticized RSFSR Gosagroprom and Ivanovo Oblast agroprom for supplying the hog complexes of Ivanovo Oblast with building materials and equipment, mixed feed and veterinary preparations. We received a response to this publication from Yu. V. Gorbunov, First Deputy Director of the Main Administration of the RSFSR Non-Chernozem Zone and from A. D. Babanov, Deputy Chairman of Ivanovo Oblast Agroprom.

[Yu. Gorbunov] The article by L. Barinova, "Mistakes on the Road to Intensification," revealed the shortcomings in building, operations and material supply of hog complexes in Ivanovo Oblast, to which similar enterprises in the region have been subject to a greater or lesser extent. These problems hinder complexes in attaining their planned indicators, decrease the effectiveness of using production potential and result in a production shortfall.

The hog complexes of Ivanovo Oblast are working unsatisfactorily also because they were accepted for operation with a low quality of building and installation work, because they were not provided with housing and social, cultural and consumer objects or cadres of trained specialists and workers. In the course of a short operations period floors have become completely unuseable, the roofing leaks, the brick masonry is deteriorating, automatic equipment is not functioning and the drinking and feeding regimen is being violated due to the acute water shortage.

Complexes were visited on numerous occasions by specialists and directors of the former agricultural ministry and RSFSR Agroprom. However, their proposals to local organs as well as the measures in "On Improving Pork Production Technology on an Industrial Basis and on Improving the Veterinary-Sanitation Condition in Large Hog Complexes," confirmed on 1 December 1983 by RSFSR Minselkhoz [Ministry of Agriculture], RSFSR Minzag [Ministry of Procurement], RSFSR Gosstroy [State Building Association], RSFSR Goskomselkhoztekhnika [State Committee of the Agricultural Equipment Association], and the Presidium of the Russian department of VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin], were not taken into account.

Reserve facilities and summer camps are not being built in the oblast, which does not enable workers to remove piglets from their mothers at the age of 35 days, to increase the sanitation break in the technological cycle to 5 days and to carry out preventative and capital repairs and technical reequipping. The needs of complexes for land to utilize manure effluence and to raise green and succulent feeds for the mother herd are not being satisfied.

Questions of supplying hog complexes with balanced mixed feeds and their well-paced delivery as well as improvements in their quality have been brought up for examination of various departments since 1974. They have been examined by the RSFSR and USSR committees of people's control, which made great demands on the administration of the former RSFSR Ministry of Procurement. In August 1987 the RSFSR Ministry of Grain Products was heard at a meeting of the Russian Republic USSR Gosstandart [State Standard] on improving the quality of mixed feed production. Nevertheless as of yet there have been no special changes in this area.

The main reasons for the low quality of mixed feeds are, on the one hand, the unsatisfactory condition of equipment and metrological instruments, poor technological

discipline, inadequate control over the quality of raw materials and finished products and, on the other hand, the fact that the raw mixed feed materials that are delivered do not meet qualitative standards and technical conditions (grain forage, grass meal, meat-bone meal, oil cakes and groats). The following measures are being carried out to eliminate these problems:

- relations with the directors and specialists of RSFSR Minkhleproductov [Ministry of Grain Products] are changing—all problems are being decided constructively. It is planned to carry out joint examinations and meetings of the boards in mixed feed plants that violate established requirements. Thus, in Ivanovo Oblast in December there was an examination of the work of mixed feed plants, the results of which were the basis for issuing a joint resolution by the oblast production association of grain products and the agricultural committee, which indicated specific measures for the well-paced delivery of quality products;
- by order of RSFSR Minkhleproductov mixed feed plants are being assigned to newly-introduced hog complexes;
- the material-technical base and technical reequipping of mixed feed plants are being strengthened. New mixed feed plants have been introduced—Muromskiy in Vladimir Oblast, Teykovskiy in Ivanovo Oblast, Velikolukskiy in Pskov Oblast, Velikoustyugskiy in Vologda Oblast and Andropovskiy in Yaroslavl Oblast. Shchekinskiy Mixed Feed Plant in Vologda Oblast and Kotlasskiy in Arkhangelsk Oblast as well as a number of others are being renovated. The building of a mixed feed plant is planned in the city of Vyksa of Gorkiy Oblast to provide Turtapskiy Hog Complex with feed.
- hog complexes with mixed feed plants are making a transition to contract relations, which foresee the responsibility of sides and material incentives for the workers of mixed feed plants for the end product of hog complexes, depending on the quality of mixed feed produced (according to a letter from Minkhleproductov and RSFSR Gosagroprom dated 8 December 1987).
- with the goal of eliminating toxicity, decreasing losses and increasing transportability mixed feeds are granulated by means of the SK-3 and SK-4.
- state reception is being introduced in mixed feed plants, which increases the responsibility of the collective for mixed feed quality.
- constantly acting commissions are being created to control the quality of mixed feed products; "Days of Quality" are being confirmed and are functioning in mixed feed plants.
- upon local proposal, beginning in the second 6 months of 1988 the right to examine the assortment for the

production of mixed feed has been given to the production associations of grain products, agroindustrial committees and specialized hog enterprises.

A remaining acute problem is the unsatisfactory material-technical supply of complexes, which is hindering the implementation of planning-preventative repairs and technical services and which results in excessive wear and tear of equipment, frequent breakdowns and the violation of production technology. Material-technical supply of large complexes was examined at joint board meetings of the USSR MSKh [Ministry of Agriculture] and USSR Goskomselkhoztekhnika in 1974 and 1978, by the deputy chairman of the USSR Council of Ministers in 1979 and by the USSR Gosplan chairman in 1983. These questions have been brought up before the CPSU Central Committee. However, the situation involving material-technical supply did not improve.

On 13 February 1989 at a board meeting Gosagroprom of the RSFSR Non-Chernozem Zone examined problems involving the technical status and utilization of production capacities in complexes and obliged oblast agroproms and autonomous republic gosagroproms to review the technical conditions and registration of complexes along with planning organizations, to develop a plan of measures to implement renovation and technical and technological reequipping, to improve the use of production capacities, and to prepare proposals on allocating land to complexes for the organization of their own feed production.

At the present time an application is being prepared on increasing the norm for allocating material-technical resources for the repair-operational needs of complexes.

Oblasts and autonomous republics are taking measures to improve the stability of operations of hog complexes. With the goal of carrying out the renovation of production facilities and of making the transition to removing piglets at the age of 35 days reserve facilities have been built for the upkeep of 16,000 bachelors and gestating mothers and of 3,000 farrowing places. Moreover, 63 summer camps have been built, including 24 for 4,400 hogs for farrowing. In order to improve the filling out of the herd with pedigree animals complexes have built breeding farms for 9,972 primary mothers. Complexes have 58,000 hectares of land.

In large complexes all biological waste is processed into protein feed which is used to balance rations; feeding the maternal herd succulent and green feed is practiced.

[A. Babanov] The Ivanovo Oblast Agroindustrial Committee reports that the facts presented in L. Barinova's article, "Mistakes on the Road Toward Intensification" (SVINOVODSTVO, No 6, 1988) about the shortcomings tolerated in building the Borovoye and Vorozhino hog complexes, the low quality of building work and the unsatisfactory supplying of these enterprises with special feeds and various materials and equipment actually are true.

In connection with the mistakes tolerated in the techniques for maintaining and moving various age groups of hogs and with the need to lengthen the suckling period for hogs from 26 to 35 days and to increase sanitation breaks in free sections from 2 to 5-6 days, projected capacities of hog complexes for the present group of facilities, according to the conclusions of Giproagrotekhprom [State Planning Institute for the Agrotechnical Industry], comprise: in Borovoye Sovkhoz—8,300 tons of pork annually, and in Vorozhino—4,200 tons annually.

With the goal of increasing production and pork sales by these enterprises to the original plan volumes of 12,600 tons for Borovoye and 6,300 tons for Vorozhino, resolution number 132 by the board of the oblast's agroindustrial committee dated 23 December 1987 has indicated and is putting forth specific measures dealing with the repair and renovation of existing structures and additional building of objects having a production and cultural-everyday purpose in these sovkhozes. To accelerate their introduction measures are being taken to recruit collectives of industrial enterprises and organizations as well as military builders for this work.

During the renovation and building of new facilities in hog complexes it is planned to use progressive elements in the technology of hog maintenance, microclimate systems, feed distribution, and removal and utilization of manure following the example of Moldavskiy Sovkhoz of the Moldavian SSR.

As before, an unsatisfactory supply of special mixed feed is a serious hindrance to increasing pork production in complexes. Teykovskiy Mixed Feed Plant, introduced into operation on 1 January 1988, operates at an extremely uneven pace and systematically cancels coordinated monthly calendar schedules for the delivery of special assorted mixed feeds. The quality of these feeds often does not correspond to OST8-20—77 requirements in many important elements of nutrition, and some test batches are characterized by an elevated bacterial seeding and toxicity.

In 1989 there was some improvement in the supply to hog complexes of building materials and equipment, and more medications, POS-5 equipment, identification tags and plotting tables are being provided. However, as concerns many basic supplies such as reinforced roofing shingle, brand 500 cement, electrical cable products, chemical-resistant paint, galvanized iron, pipes and so forth, the situation involving supplying these enterprises remains urgent as before because for a number of them annual allocated funds for the oblast do not cover the needs of even Borovoye Sovkhoz alone.

In an effort to improve supplies to hog complexes the management of party and soviet organs and of the oblast agricultural committee on numerous occasions have turned and continue to turn to the Non-Chernozem Zone Gosagroprom, Gossnab and other national supply organizations as well as to enterprises-suppliers with the

request to accelerate and increase the volume of supplies of essential material and equipment.

As a result of the measures that were taken in 1988 Borovoye Sovkhoz sold 9,500 tons and Vorozhino Sovkhoz—4,500 tons of pork to the state, or correspondingly 1,173 and 218 tons more than in 1987. Average daily weight gain of animals being raised and fattened increased by 28-37 percent as compared to the previous year. In 1989 Borovoye Sovkhoz plans to sell 9,500-9,600 tons and Vorozhino—4,500-4,700 tons of pork.

[From the editors] If readers were attentive they probably noticed that RSFSR Non-Chernozem Zone Gosagroprom considers other departments to be the guilty parties in the non-fulfillment of resolutions and orders, whereas Ivanovo Oblast agroprom considers RSFSR Non-Chernozem Zone Gosagroprom and supply organizations to which it has appealed for help on numerous occasions to be the guilty party. But can either department take upon itself the responsibility and efficiently react to the resolutions and orders if they needed almost a year to respond to the editors?

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MACHINERY, EQUIPMENT

Problems, Progress in Supplying Equipment To Lessees

Problems With Mid-Sized Tractors

904B0090A Moscow

MATERIALNO-TEKHNICHESKOYE

SNABZNEHIYE in Russian No 9, Sep 89 pp 62-64

[Article by V. Buzuyev: "A Tractor for a Lessee"]

[Text] Generally speaking, are we producing equipment which, in terms of the general parameters, is suitable for lessees, small farms and family farms and is capable of competing against similar products on the world market? Yes, we are producing such equipment. For example, there is the T-25 tractor, a mid-sized unit with a rating of 25 horsepower. It is being produced at the Vladimir Tractor Plant. Our lessees would be happy to obtain this machine and the quicker the better. But they are unable to. Why?

Everyone is already aware that the USSR produces five times more tractors than does the U.S.A. But the demand for highly efficient machines is not being satisfied. The situation is aggravated by the fact that domestic agricultural machine building is incapable of responding to the market conditions in a flexible manner. It is known that farms recently took out practically free loans from the state and that thanks to these loans they were able to purchase inefficient items of equipment at lowered prices. The only thought from the

center was that the distribution was to be carried out among the kolkhozes and sovkhozes. If only it could have been us—such was the dream in the various areas. Everyone is familiar with our "own" kolkhoz landscape: a field, an abandoned semi-dismantled tractor...

Mismanagement, absence of ownership—inevitable companions of the administrative system. Tractors and other agricultural equipment stand dismantled and rusting out on the open fields, owing to the fact that the economy is not being influenced by market laws.

Obviously, goods are needed if we are to have a market. Yes, the problem derives from the fact that the annual requirement for T-25 tractors on the domestic market, according to the estimates of experts, amounts to somewhere in the neighborhood of 100,000 machines. Yet the Vladimir plant with its old areas and capabilities is scarcely capable of coping with the production task—36,500 tractors annually. Moreover, of this number, 20,500 are exported, 10,000 are distributed within the Gosagroprom [State Agro-industrial Committee], 2,500-3,000 are made available for completion work to be carried out, and only 3,000 are consigned to private parties and only in response to orders issued by trade organizations. The enterprise itself cannot dispose of its own products.

Those desiring to procure the T-25 come to the Vladimir Tractor Plant from all areas of the country. They implore and they beg: "Sell. If you were to sell even a portion of your machines, we would reject the products of the Lipetsk and Minsk tractor plants." Their machines are more complicated to operate and also more expensive. It bears mentioning that the retail price for a T-25 is approximately 5,000 rubles. This information was provided to me by B. Markov, the deputy general director of the plant for commercial problems.

Yes and I myself was a casual witness of an incident that took place in B. Markov's office. A lessee from Latvia entered the office and proposed the following transaction. The Latvians will supply the Vladimir Tractor Plant with 1,000 pairs of Yugoslavian women's shoes and the plant will conclude an agreement with Baltic lessees and supply them with T-25's. Such transactions have become quite common. It is the only response to the intensifying deficit.

You ask how is it possible for the plant to conclude an agreement for such deliveries if it has already been established exactly what is to be sold and to whom during 1989. Indeed, we have already stated that the Vladimir enterprise cannot dispose of its own products independently. B. Markov explained: the deliveries will be carried out from that volume of products planned for export and which the foreign consumers rejected during the fourth quarter for various reasons. In this instance, the Vladimir Tractor Plant is authorized to select the consumer independently as a confirmed monopolist and not the other way around. Here we have a deformation of commercial initiative. The

market does not dictate its conditions, but rather the producer for the deficit product.

But why are we confident that this year the enterprise will experience rejections? Actually, there has not been one instance when the foreign consumers "selected" the entire volume of products ordered, despite the fact that in their opinion the tractor was good and the world market stood in need of new and promising machines. Of the 20,000 tractors planned, it is expected that approximately 18,000 will be sold. In principle, this is good. The plant will receive approximately one and a half million rubles. Such is the total amount of currency earned annually. Where will it be spent? Among recent acquisitions—Ivanovo machine tools with import completion parts and personal computers.

Another question arises: generally speaking, is it necessary to plan a volume of export deliveries which an enterprise is incapable of handling? Beyond any doubt, the mentioned system is profitable for the Vladimir Tractor Plant. In concluding contracts with consumers who are doing nothing about the deficit, they are taking advantage of the moment at hand. The misfortune lies in the fact that behind the seemingly external solution for the deficit problem—for example, the requirement for good footwear for female workers at the Vladimir Tractor Plant will be satisfied partially—difficult-to-remove sore spots are removed. First of all, an unjustified increase in the costs for the products of the tractor builders is encouraged. Secondly, the redistribution of the deficit from some individuals to others brings about a wave of product starvation in another region of the country and it is still not known if it will "strike" with even greater force at this same Vladimir Tractor Plant.

The naturalization of an establishment has extended its tentacles into such a sphere as the modernization of the old areas of an enterprise. How can this be done if all types of construction materials are included in the deficit, including the simplest type—brick? And indeed the Vladimir Tractor Plant must increase its production of tractors by a factor of 1.5-2 in the immediate future. Such is the task assigned by the government. What is the solution? The general director, A. Grishin, is inclined to believe that a small brick plant should be purchased in a fraternal country. Good, the brick problem will be eliminated and then what next? Should a shop for the production of other materials be built? Should naturalization be expanded?

Moreover, I would like to note for the sake of fairness that the opinions of the leaders of the tractor plant with regard to the purchasing of a brick plant are shared. Some are convinced that it is necessary to do this, while others, for example the deputy general director for economics, I. Bakaleynik, caution against a senseless dispersion of resources. The latter maintain that a shortage in bricks is not the main problem requiring an immediate solution.

It bears mentioning that today the plant is living through a truly critical period. In pondering the future and genuine commerce, which must not be burdened by naturalization, the collective of the enterprise's design office developed a family of new T-30-type tractors. This new tractor served as the basis for the creation of a design for a multiple-unit assembly for the carrying out of mechanized operations. These machines have undergone their initial testing and have been assigned high grades by the specialists.

"Certainly, these machines still have some defects," stated the general director, A. Grishin, "but they have practically been eliminated. I was recently in Yugoslavia where I attended an international exhibit of tractors. And I can boldly state that I did not see any such tractor with this same configuration or an assembly for the issuing of feed, despite the fact that the exhibit included many items of agricultural equipment—this was the third international exhibit in terms of size. At the plant there is a continuous flow of deliveries of new items of equipment from abroad: tractors and assemblies. However, we are unable to assign a machine for flow-line production. We lack the capability. Moreover, we are operating on the basis of complete cost accounting and self-recoupment and thus we must count our money and not produce equipment at any cost."

Among those factors which preclude the possibility of lessees even hoping to obtain highly efficient machines from the Vladimir Tractor Plant—constant interruptions in logistical support for the principal production operations. The situation with regard to bearings has become aggravated. The plant must obtain a portion of its bearings through Vladimirlavsnab. But the main territorial administration is not carrying out its obligations. Since the products which are in short supply are relatively cheap, the fines being imposed upon Vladimirlavsnab for insufficient deliveries are not very great. For example, let us take bearing 10319. Each T-25 tractor includes one such bearing. Other products produced by the tractor builders—engines—contain several units. Thus the main territorial administration undersupplied the plant with 10,319 bearings in the amount of 215,000 units. During the first quarter of 1989, the main territorial administration received fines amounting to 22 rubles and 64 kopecks. This was not excessive. In terms of bearings, the fine amounted to approximately 250 rubles.

Actually, in accordance with the statute on deliveries, a fine amounting to only 8 percent of the overall volume of undelivered products can be collected from a violator of contractual discipline. In the opinion of the chief of the Department for Foreign Completion and Cooperation at the Vladimir Tractor Plant, N. Voronin, the fine must amount to 8 percent of the overall value of the products remaining unfinished as a result of insufficient deliveries. One can understand N. Voronin: recently the plant has been adversely affected by disruptions in its logistical supply. But the causes of this unfavorable situation in the area of supply cannot be eliminated by merely

employing stern economic sanctions. Under the conditions of so-called cost accounting, it has become unprofitable for enterprises to produce products of a cheap assortment.

Thus the Kursk 20th GPZ [state bearing plant] is included among the principal suppliers of bearings. It is an old plant. It is in need of modernization and reconstruction if its production is to be reorganized in conformity with the future development of the domestic market. And where are the resources to come from? They cannot be earned from the bearings needed by the Vladimir Tractor Plant. At the same time, other enterprises are continuing to parasitize and prosper, based upon the same "gross" figures which prevailed during the stagnant period. One does not have to look very far for examples. The Vladimir Tractor Plant obtains PD-8 starters from the Lipetsk Plant for Start-up Engines. In the literal sense of the word, two bolts are inserted in them here and they are then returned to Lipetsk—to the Lipetsk Tractor Plant, the only consumer for the mentioned starters. It would appear that these starters are not even tested at the Vladimir Tractor Plant. And so what? It turns out that the starters are included three times in a cost expression in the production volume: at the Lipetsk Plant for Start-up Engines, at the Vladimir Tractor Plant and at the Lipetsk Tractor Plant.

It is said that the chief reason for such deformation is the poorly thought out logistical supply system which has lost all control over limit-free deliveries and which leads to a biased view of the problem. Moreover, the cost indicators are directed towards increasing economic expenditures and raising production costs, with no additional labor in behalf of such production. The result is well known: the payment of unearned money and the creation of a favorable atmosphere for inflation. On the one hand, the "gross" figure, in the manner of a drug, provides temporary relief to an enterprise and, on the other, it aggravates the deficit nature of our economy.

Actually, the work of the main territorial administrations is still inevitably subordinate to the laws governing the gross indicators. This is readily apparent when the interrelationships of the tractor plant and Vladimirlavsnab are taken into account.

I have already mentioned the fact that the status of the main territorial administration is for all practical purposes not at all affected by the precarious nature of the principal production operations at the tractor plant. Moreover, the profit at Vladimirlavsnab is increasing—by 36 percent over a period of 5 months during 1989. The administration has no unprofitable subunits. Thus the laws of the market are not in effect when satisfaction of the needs of consumers determines the degree of financial well-being of an intermediary and when the latter has competitors. Thus the laws of the market are deformed precisely by the notorious "gross" concept: sales volumes and price mark-ups that are collected by

the main territorial administration for centralized deliveries, for the decentralization of purchases and for services. Even at those times when the Vladimir Tractor Plant acts apart from Vladimirlavsnab and its representatives make arrangements with their suppliers (in essence, they carry out the work of a territorial organ), glavsnab [main supply administration] receives withholdings for deliveries which it did not organize.

B. Markov could not conceal his categorical nature:

"When we began working with Vladimirlavsnab, it became clear that, having obtained the status of a main administration, it nevertheless remained without areas and without firm economic relationships. In essence, the new territorial organ did not sense the measure of its own responsibility for logistical supply for industrial enterprises. It does not understand a production line and is not aware of the cost of such a line. And when you turn to glavsnab and state that we do not have such a bearing, we hear in reply: where we can obtain it. The question is asked: why is such an ineffective territorial organ needed?"

One can argue with B. Markov regarding the degree of responsibility of Vladimirlavsnab for satisfying the requirements of the tractor plant. Vladimirlavsnab is exerting a definite amount of effort directed towards reducing the shortages. For example, reserve supplies of paint, lineoleum and facing tiles are created. Their value is in the neighborhood of 4 million rubles. The region's requirements for V-belts, including those of the Vladimir Tractor Plant, are being satisfied fully. Certainly, this represents only a minute portion of the deficit.

The tense nature of this situation is not decreasing, owing to a number of reasons. For example, owing to fault on the part of the suppliers, a 1989 contract had still not been concluded in June with the territorial organ for direct limit-free orders for 28 percent of the planned volume. The disastrous situation of Vladimirlavsnab, as viewed by the chief of the Planning Department, L. Maslov, is explained largely by the fact that when dividing up the "pie" with Ivanovoglavsnab, the latter by no means shared the best "piece" with the people in Vladimir. One merely has to look at the metal base in Vladimir. According to estimates by specialists, at least 3 million rubles from the profit of Vladimirlavsnab will be turned over in the near future for the construction of new areas. The oblast is metal-intensive and the existing capabilities are incapable of handling the workload. Enterprises of Ivanovoglavsnab for secondary raw materials and for the repair of packaging materials are in a neglected state. Yes, and inequality exists in the official schedule for the two territorial organs.

"The staff of the Ivanovo main administration," stated L. Maslov, "includes 260 workers and the Vladimir administration—180. And the volume of industrial production in the operational region of Ivanovoglavsnab is 5.5 billion rubles and in the region of Vladimirlavsnab—8 billion."

Obviously, the true potential of the regional element for ensuring the availability of production resources was not taken into account when converting over to the new territorial structure for administration. The old relationships were disrupted and new ones were not created.

Agricultural lessees have something in common with the argonauts who set out on a dangerous journey in search of the golden fleece. And both groups have had to undergo serious trials before achieving their desired goal. If each lessee is to be able to purchase a T-25 tractor in the domestic market, then improvements must be realized in individual spheres of the economy, for example in the supply system and throughout the entire economic mechanism. The signal beacons have been defined: segments of an open market and the convertible ruble.

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Plans for Mini-tractors

904B0090B Moscow SELSKAYA ZHIZN in Russian
5 May 89 p 2

[Article by A. Gulyayev, Gomel: "Long-Awaited Mini's"]

[Text] This year 10 new models of a mini-tractor developed by a production association of Gomselmash [Gomel Agricultural Machinery Plant] underwent testing at the Vladimir Machine Testing Station.

The equipping of technological lines for their production will commence in May. The series production of 25,000 units of these machines, so needed by our people, is expected to commence in 1991. Thereafter, this production will be expanded to 40,000 units annually.

Latvian Equipment Requirements

904B0090C Moscow SELSKAYA ZHIZN in Russian
15 Nov 89 p 1

[Article by SELSKAYA ZHIZN correspondent, Riga: "Initial Models"]

[Text] More than 2,000 small farms have been created throughout the republic. They are beginning to form an equipment order for our industrial enterprises. A feature of this order is the fact that the machines must be mid-size and thrifty.

In responding to the requirements of the farmers, some plants and repair enterprises of Selkhoztekhnika have introduced substantial corrections to their operations. The development of technical documentation has commenced in the design bureaus, and production operations are being prepared for the production of this equipment for the peasants. The initial experimental models have appeared. Included among them are plows, cultivators, potato planters, feed distributors, loaders and other towing and attachable implements.

Altay Kray Equipment Tests

904B0090D Moscow SOVETSKAYA ROSSIYA in Russian 26 Nov 89 Second Edition p 1

[Article by L. Parshukova: "With Skilled Hands"]

[Text] The first experimental models of mini-tractors have been produced at the Altay Tractor Plant in the city of Rubtsovsk. They have successfully passed plant examinations and have now been turned over to lessees at the Kolkhoz imeni Telman in Zmeinogorskiy Rayon in the Altay Kray for thorough field testing.

It was at this farm that these small machines had their start. Several of the models were produced by local skilled craftsmen. Tractor builders, having become aware of this fact, visited the kolkhoz. Borrowing the idea, the plant's designers created their own model of a mini-tractor and certainly of an improved type. Preparations for its series production have now commenced.

Specifics of Small Tractors, Equipment Discussed

904B0096A Sverdlovsk URALSKIYE NIVY in Russian No 11, Nov 89 pp 44-46

[Article by A. Skomorokhov and V. Skomorokhov, Sverdlovsk Agricultural Institute: "Small Tractors and Mini-Units"]

[Text]

S. V. Kuklin, Perm Oblast: "Where can one find literature on small scale mechanization? Can't you print such articles in your journal?"

The expansion of brigade, family and lease forms for organizing work and the development of private plots require changes in the type of equipment in the agroindustrial complex. This problem is also important because private plots make a substantial contribution to food supplies. They produce about half of the country's potatoes, produce and berries and 21 to 26 percent of its animal products. However, work on them is laborious because it is poorly mechanized and is based mainly upon manual labor. Because of this, tractor and agricultural machinery building has been given the task of considerably expanding the production of small tractors and motorized units with sets of attachments.

The production of small garden and orchard tractors in the country started at the end of the 1940's and the beginning of the 1950's, although in small quantities. However, during the past 2 to 3 decades the main

direction in agricultural tractor manufacturing has been increases in unit power. Although this tendency still remains important, it does not compete with nor does it substitute for the development of small equipment. This latter is an independent direction.

Small tractors are widely used in agriculture in Europe, Asia and America, where there are about 15 to 20 million. During the many years these tractors have been produced and used their design standards have attained high levels of universality and reliability. In the past 5 to 10 years there has been a marked increase in small scale mechanization in our country. These tractors are generally in the 0.2 traction quality class.

In 1987 about 95,000 tractors in this traction class were produced; in 1988 production was expanded to 110,000. However, the demand for these tractors is considerably higher: about 226,000 have been ordered at fairs, and orders for about 600,000 motorized units annually have been placed at USSR Tsentrosoyuz [Central Union of Consumers' Cooperatives]. Minavtoselmash [Ministry of Automotive and Agricultural Machine Building] plans to increase the total production of various model motorized units and microtractors to 280,000 - 300,000 in the next few years.

If work is organized by the lease method, the collective requires not only small scale mechanization, but larger equipment: tractors in traction classes 0.6; 0.9; 1.4; and possibly 2 and 3. It is therefore obviously advisable to give the basic parameters and potentials of tractors in at least the first three classes.

Small (miniature) tractors, or simply minitractors, differ in their functions, arrangements and technical capabilities. With regard to their design and range of use they are divided into motorized equipment (motorized plows, motorized mowers, etc), motorized units and microtractors equipped with a large collection of attachments and mounted equipment. With regard to the position of the operator, minitractors are divided into: walking operator, riding operator, walking-riding operator.

Table 1 gives the main technical and agrotechnical parameters of minitractors and tractors in the small traction classes (0.6; 0.9 and 1.4). Most minitractors have working speeds of around 1.5 to 8 kilometers per hour, hauling speeds are 15 to 20 km/hr; motorized units do not weigh more than 200 to 250 kg, more commonly 100 to 150 kg; motorized equipment weighs 40 to 60 kg, engines are from 1 to 5.9 kw (1.3 to 8 horsepower).

Table 1. Main Parameters of Minitractors and Small Traction Class Tractors

Type	Power, kw/h.p.	Tractive effort, kN/kg	Weight, kg	Wheel Formula	Wheel size, mm	Road clearance, mm	Number of speeds, forward/reverse	Speed range km/hr	Size of drive axle mm,
MK-0.85 Serna	1.8/2.5	—	42	2x2	—	—	—	1.9 - 7.0	—
MK-1 Krot	1.8/2.5	—	50	2x2	290	—	1/1	—	—
M-03 Pchelka	2.2/3.0	—	59	2x2	350	135	2/0	3.3 - 11.2	102 - 254
KMM-1 Strizh	1.8/2.5	—	60	2x2	86 - 1,145	—	—	4.0	—
MTZ-05 Belarus	2.94/4.0	1/100	135	2x2	450 - 700	300	4/2	2.0 - 9.4	150 - 330
MB-1 Luch	3.7/5.0	1/100	100	2x2	310	158	2/2	4.0 - 10.0	102 - 254
Super-610 Kutaisi	3.7/5.0	1/100	97	2x2	332 - 480	165	3/1	1.7 - 7.3	102 - 254
T-08 Maiysh	5.9/8.0	2/200	445	4x2	560 - 890	300	4/2	2.5 - 15.0	—
T-16M	14.7/20	6/600	1,425	4x2	1,200 - 1,800	560	6/1	4.9 - 20.6	240 - 813
T-25A	18.4/25	6/600	1,780	4x2	1,200 - 1,400	280/407	8/6	1.0 - 21.9	240 - 813
T-30A	22/30	6/600	2,480	4x4	1,200 - 1,500	280/360	14/12	0.9 - 23.6	240 - 813
CSh-28A	22/30	6/600	2,250	4x4	1,200 - 1,800	500	12/7	0.6 - 25.0	240 - 813
T-40M	36.8/50	9/900	2,380	4x2	1,200 - 1,800	500	6/1	6.9 - 30.0	900 - 965
YuMZ-6A	44.1/60	14/1,400	2,900	4x2	1,260 - 1,860	450	5/2	7.6 - 24.5	330 - 965

An important tractor parameter is horsepower per ton. For minitractors it is 25 to 65, substantially more than for large tractors (22 to 26 horsepower per ton).

Plants in the country manufacture mainly motorized equipment and motorized units. The 1987 production figures are: MB-1—60,000; MK-1—10,000; MTZ-05—8,000; KMM-1—6,800; and Super 610—1,300; a total of 96,000 units. In the following we will examine the design of only these groups of minitractors. As does any tractor, motorized equipment and motorized units have the following main components: engine, transmission, drive train, working equipment and control mechanisms. Because of their single axle layout and lack of a frame they have a quite compact arrangement. The engines are most often located above or ahead of the transmission.

The engines of all domestically produced motorized units (Table 2) have carburetors (some foreign models

are diesel) and one cylinder. They are four cycle, less frequently two cycle and usually run on A-72 or A-76 gasoline. They have forced air cooling using a flywheel fan. The lubricating systems of four cycle engines are mixed; that is, closed connections are lubricated under pressure; other components are sprayed. Two cycle engines are spray lubricated by adding oil to fuel in ratios of 1:20, 1:30 and 1:16 for breaking in.

The fuel mixture in the engine is ignited by a single spark magneto, a flywheel magneto or noncontact electronic ignition. Engines are started by a hand pulled cord. There are also pedal starters and cranks. Some have compression releases to make starting easier.

The transmissions of all the minitractors examined are manual (some foreign models have fluid transmissions). General information about transmissions is shown in Table 2.

Table 2: Basic Information about Minitractor Design

Type	Engine rpm	Engine cycles	Fuel type	Fuel consumption, kg/hr	Clutch	Transmission	Main Drive	Final drive	Working equipment
MTZ-05	3,000	4	A-72, A-76	1.26	Multidisk in oil bath	Mechanical with constant engagement	Conical	Cylindrical single stage	PTO 1,000 rpm

Table 2: Basic Information about Minitractor Design (Continued)

Type	Engine rpm	Engine cycles	Fuel type	Fuel consumption, kg/hr	Clutch	Transmission	Main Drive	Final drive	Working equipment
Super-610	3,600	4	A-72, A-76	1.65	Dry conical	Mechanical with reverse	Worm gear with disengagement	No	PTO 790 rpm
M-3	5,000	2	A-72, A-76	1.00	Multidisk in oil	Mechanical with movable pinion	Two stage conical	No	PTO 1,000 rpm
MB-1	3,200	4	A-72, A-76	1.63	V-belt with belt tightener	Mechanical with movable pinion	Chain	No	No
MK-1	6,000	2	A-76	1.20	V-belt with belt tightener	Mechanical with belt tightener	Chain	No	No

Motorized units have standard clutches. Motorized tools have V-belt drives from engines to reducers. They are engaged or disengaged by an easily moved spring loaded roller. The main transmissions use worm gearing (Super-608, 610) for self-braking; that is, movement cannot be transmitted from the wheels to the engine. Therefore, the drive wheels are disengaged from the driven gear with the help of a flexible coupling and blocking device balls (for example when the tractor is being pushed by hand). To make turns easier, one of the couplings can be disengaged.

All the motorized units are equipped with a power take-off (PTO) to drive agricultural equipment. In motorized equipment the working units are connected directly to the ends of the drive shaft instead of wheels, or they have their own drive.

Motorized unit running gear most often has pneumatic tires, with provisions for installing lugged metal tires. The wheels are powered; that is, they exert tractive effort. Wheel weights can be used to increase or decrease traction. Tire pressure on most machines is 0.12 to 0.17 MPa; on the MTZ-05 it is 0.08 to 0.12 MPa. Single purpose motorized equipment has smaller tires.

Motorized units have adjustable wheel gauges. Wheel gauge on the MTZ-05 can be 450, 600 and 700 mm by moving the wheels along the axle or connecting extensions to axle ends. The Super-608 and 610 motorized units have continuously adjustable gauge from 332 to 480 mm by using special screws on the drive half axles.

A clamp with an hole for a pin is used to attach equipment to a motor unit. Universal suspension devices (couplings), with attachments for equipment and for regulating the depth and span of tillage and other equipment can be attached to motorized units.

Generally, motorized unit controls are located on the handlebars. The clutch, gearshift, reverse and differential lock

and PTO are located near the handlebars. There is also a button for emergency engine cutoff, and a lever for adjusting the step plate.

In general, the arrangement of minitractors is as complicated as an ordinary tractor. In a survey article it is not possible to examine all the details of their design and operation. The use of minitractors gives good results in improving labor productivity. The demand for them is increasing. Production is increasing too, although slowly. Consequently their use will be expanded. It is necessary to thoroughly know their arrangements, principles of operating and regulating all mechanisms. They need careful, regular and qualified servicing.

In conclusion, we advise looking up the following literature in a library or through the interlibrary loan system: Korotkevich, A. V., et al., *Motoblok v lichnom pod-sobnom khozyaystve* [Motorized units on Private Plots], Minsk, Uradzhay, 1987; or *Mini-tractory* [Minitractors], (Edited by V. V. Burkov), Leningrad, Mashinostroyeniye, 1987.

Better Agrochemical Equipment Needed

904B0056A Moscow ZASHCHITA RASTENIY in Russian No 11, Nov 89 pp 29-31

[Article by I. I. Sushko, deputy director, GSKTB [State Special Technological, Planning and Design Office] for Agricultural Chemical Machinery: "The Creation of New Machines—A Common Task"]

[Text] A quarter of a century ago I. I. Sushko came to the GSKTB for Agricultural Chemical Machinery as a production engineer and designer. He worked on the creation of the PSSh-3, APZ-10, APS-4, PS-10, PSSh-5, KPS-10, KPS-20, KPS-40 and PS-30 mobile and stationary seed treatment units. He led the development of the first set of Soviet machinery and equipment for coating

sugar beet seeds (the KDS-0.5), vegetable seeds (KDS-0.1) and for treating delinted and fuzzy cotton seeds; there are no similar foreign machines.

Ivan Ilich has more than 50 inventions to his credit. For active participation in work on inventions and for high indicators he won the awards "Best Designer," "Best Inventor of Tractor and Agricultural Machinery," and "Honored Inventor of the Ukrainian SSR." He is a laureate of the Republic Komscmol Prize imeni N. Ostrovskiy.

Recently, I. I. Sushko, deputy head of the GSKTB for Agricultural Chemical Machinery, celebrated his 50th birthday.

Among the many reasons for the low standards in the use of chemicals to protect crops in our country, some prominent ones are the low technical level of equipment, the insufficient use of productive techniques such as low and ultra low volume spraying, the band application of herbicides and treatment that involves the use of film formation agents, and so forth.

The system of machinery for the comprehensive mechanization of agricultural production during 1986-1995 makes provisions for more than 60 types of equipment to protect crops and to treat and apply ZhKU [mixed liquid fertilizers]. A series of machines has been developed: a family of low and ultra low volume sprayers (boom sprayers—OP-200-2-01, OM-630-2, OM-320-2); blower sprayers—OP-2000, OM-630 and OM-320); a family of top dressing ZhKU applicators (PZhU-2.5, PZhU-5, PZhU-9, OP-3200, the PZhU-2.5-01 modification for soybeans, PZhU-2.5-02 for applying nematicides, the MGUS-2.5 for deep applications of ZhKU on gardens and the MVU-2000 for the application of ZhKU on grapes); a family of top-dressing applicators (POM-630, POM-630-1, POM-630-2); a unit for preparing liquids for application—(APZh-12); a family of stationary machines for encrusting seeds—(KPS-10, KPS-20, KPS-40, a mobile treatment unit—PS-30) and others.

In 1988 the OPSh-3200 heavyweight boom sprayer was recommended for production. It has a 24-meter boom and an OPV-2000 ventilator sprayer.

In order to economize on chemicals and to assure their even application, depending upon the speed of tractor movement, some sprayers can, upon special order, be equipped with the SAURZh-1 automatic system.

The SAURZh-2 is in the testing stage. It has an on-board computer to completely automate adjustments, and to monitor and maintain the main parameters of the spraying process.

The development of the PSK-20 potato treatment unit is being completed.

New generations of blower and boom sprayers will make it possible to spray orchards and grapes with 100-500 liters of liquid per hectare, instead of the 1,000-2,000 liters per hectare now being used; while field crops (grain

and row crops) will receive 75-200 liters per hectare instead of 300-800. Ultra low volume sprayers will make it possible to treat perennial crops with only 5-25 liters per hectare and field crops with 1-5 liters per hectare.

However, experience has shown that agricultural workers are habitually disinterested in reducing their use of liquid chemicals. Therefore, there are difficulties in introducing low volume and ultra low volume equipment. Zonal institutes could overcome this psychological barrier, but they are not working hard on practical recommendations to introduce progressive technologies, nor is their example convincing farm laborers of their efficiency.

The new technology can do many things. These boom and blower sprayers utilize several progressive design decisions; for example, high capacity centrifugal pumps resistant to chemicals—the booms are fitted with wear-resistant metal-ceramic deflectors and slitted nozzles with individual cut-offs. Sprayer tanks are made from corrosion resistant materials: stainless steels, fiberglass and linear polyethylene. With regard to their functions, the PZhU-2.5, PZhU-5 and OP-3200 family of top dressing applicators have no equal anywhere in the world, as they can perform surface and intrasoil applications of liquid mineral fertilizers and pesticides.

Of course, this does not mean that this system of machines has no shortcomings. It must be improved. However, this work is being delayed by the issuance of scientifically unsound orders for the development of machinery. These orders do not take into consideration the organizational tendencies in agriculture in recent years, tendencies which require the appropriate equipment. This means machinery for lease and contract collectives and others. There are many complaints about the quality of agricultural engineering requirements placed upon designers. The situation has reached a point where customers stipulate the number of reducers that should be used in a machine or the speed at which it should rotate. At the same time, orders omit very important agronomic parameters and their scientific justification. These parameters must be made more precise during machine design, delaying development time. There must be cooperation between institutes and designers when the technological parameters for new processes and machinery are being substantiated.

To more effectively use pesticides and to minimize their loss, the GSKTB is developing applicator units that use electrostatically charged spray particles. Unfortunately, we are working alone on this, without support from agroprom institutions.

Since 1985, the GSKTB, jointly with several institutes in the Siberian Department of the USSR Academy of Sciences, has been working on application units for an aerosol generator with regulated dispersion. A mockup of a generator has been built. This can be the basis for working up customers' orders for developing a machine.

Preliminary experiments show the promise of aerosol techniques in fighting pests of grain, cotton and other crops.

With this process, chemical consumption norms are calculated in dozens of grams instead of in kilograms, as is done today. It is advisable to have two or three types and sizes of high dispersion aerosol applicators, providing for optimal treatment under various conditions.

Here also there is a place for cooperation with agricultural institutes.

In 1987 the GSKTB began the construction of mock-up models of an water emulsifier attachment for applying liquid fertilizer and an attachment for applying microgranulated pesticides. A sprayer attachment for applying entomophages is being designed.

It is extremely important to equip farms with modern application technology. Even though the process for encrusting seeds was introduced fairly recently, the new set of KPS-10 machines is already being used at most seed corn sorting facilities. The set of machinery includes equipment for adding film formation substances to liquids, devices for loading pesticides and grinding film formation substances and machinery for treating and drying seeds. Most production operations are mechanized and automated. Unfortunately, there are many complaints about treatment preparations. There is considerable dust at work areas for sealing packages and unloading pesticides. It is practically impossible to mechanize and automate these processes at seed processing plants. The production of liquid or paste treatments has still not been organized. Treatment technology and the properties of Na KMTs film formers cannot be deemed completely appropriate. During storage these substances turn into dried up clods and paste. Seeds processed with NaKMTs stick together and require processing by energy consuming drying devices, a hinderance to the design and operation of machinery.

In 1988 development work was completed on the KPS-20 and KPS-40, highly productive sets of equipment for farm points. However, construction plans have still not been drafted for this equipment. The GSKTB came out with a suggestion to use rapidly assembled metal buildings, but this was not supported.

The layered treatment of seeds with fungicides, insecticides and growth stimulants, widely used in other countries, is very promising. It assures good seed spacing with lower seeding rates and high plant survival rates during the first 6-8 weeks without additional processing. However, the GSKTB does still not have initial requirements for developing such machines.

The series production of the KPS-20 seed potato treatment unit is planned for the second half of this year.

Designers and machinery builders cannot help but be concerned about shortcomings and oversights that, if eliminated, would mean improved technical standards

for machinery. We note the complexity of kinematic and hydraulic systems, the short service life of some components, their insufficient durability and difficulty of repair.

Sometimes "raw" designs for machinery and components that have not gone through all stages of development and testing are put into production. Farm laborers justifiably complain about the quality and incompleteness of machinery delivered to them. Hydraulic equipment leaks and welds are poor quality. There are also serious complaints about operating instructions that come with machinery: diagrams are illegible and smeary; some pages are practically unreadable. I hope that machinery builders will be able to improve their work.

Qualitatively new tasks and forms in the development of the country's agro-industrial complex require the serious intensification of scientific research to improve traditional and create fundamentally new machinery based upon the achievements of contemporary agricultural science, automation, electronics, biology and other sciences. The creation of new equipment for agriculture is becoming a genuinely science intensive process. Sizable forces are being enlisted into it—the scientific research laboratories of educational, sectoral and academy institutes, plant protection stations and others. Mathematical modeling of processes and the optimization of basic kinematic parameters for designs play an important role in machine development. A package of programs for calculating strength, multi-criteria optimization of parameters and automated graphics have been developed at the GSKTB.

In order to improve machinery reliability and longevity and to reduce the use of metals, work is being conducted on the expanded use of progressive new materials and techniques of strengthening. Analysis shows that improvements in the structure of materials used can reduce the weight of machinery by 10 to 12 percent.

If we now try to imagine machinery in the year 2000 it will above all be reliable, less metal-intensive, equipped with automated systems for process control and will be well designed.

Load bearing welded metal structures should be made from high strength thin walled stock and medium load bearing parts and components from shaped aluminum and alloys. The use of polymers should increase 8- to 10-fold. Parts subject to wear will be made from metal ceramics and composite materials.

The use of various polymer coatings is foreseen.

Special wide low pressure tires will be used to reduce harmful compaction of the soil.

The expansion and closer collaboration of design office specialists with scientists from the USSR Academy of Sciences and the country's higher educational institutions, the use of new effective forms of collaboration (on a cooperative basis, the creation of temporary creative

collectives, if necessary attracting progressive foreign firms, and other methods) will make it possible to speed up the development of machinery and improve its technical standards.

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AGROTECHNOLOGY

Agriculture Needs More Scientific-Technical Support

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[Article by N. Krasnoshchekov, deputy chairman of the State Commission of the USSR Council of Ministers on Food and Procurements: "Scientific-Technical Progress as the Foundation"]

[Text] Workers in agriculture and in the processing industry of the APK [Agroindustrial complex] are marking their professional celebration under difficult circumstances related to the renewal of the political and economic foundations of the country's agrarian sector. The new policy indicated in the March 1989 Plenum of the CPSU Central Committee orients village workers toward radical changes in economic relations within agroindustrial production, increased effectiveness in using resources, the extensive introduction of cost accounting, cooperative and lease relations, and the assimilation of progressive forms of labor organization and the latest scientific achievements.

On the eve of the professional celebration it would be useful to think about what has been accomplished in the course of perestroika to improve food supplies for the population. Here the major role belongs to the agroindustrial complex. After all it is from its production that about three-fourths of the country's consumer fund develops.

Of course changes have occurred. Average annual grain production is greater by 26 million tons during the current five-year plan than during the preceding 5 years. The situation has improved somewhat in dairy farming. But we must say openly that we are still far from a real breakthrough. Despite growth in production potential, the return in the agricultural sector remains low as before. Growth is being hindered first and foremost by the slow restructuring of economic relations. This is resulting in the fact that a significant portion of production potential in agriculture and in the processing industry has been utilized for many years with extremely little return. In 1988 in the country as a whole every third hectare of grain crops yielded fewer than 10 quintals, and in every seventh enterprise milk yield per cow did not exceed 2,000 kilograms.

The existing base for storage, procurement, shipment and processing of grain, beets, potatoes, fruit and other products is not able to procure even the planned harvest

in a timely manner and without losses and then to supply it to the consumer. Non-production expenditures and losses exceed 20 billion rubles. The building program in the food branches of industry is being carried out unsatisfactorily. There remain a significant number of kolkhozes, sovkhozes and processing enterprises with large production losses, and with an intolerably low labor productivity and return on capital.

Radical measures are needed to correct the situation. What is essential is a complete rejection of administrative methods of management and a transition to economic methods. Relations between agricultural commodity producers and collectives of the machine-building complex must be built on an equal basis. Changes in the forms of property will have a decisive significance for the means of production. Great organizational and economic transformations in scientific and design activities of artists' collectives and an increase in the prestige of engineering-intellectual labor as the basis for scientific-technical progress within the APK are needed.

At the present time all APK administrative links are being transformed and their functions are changing. Economic management methods must occupy a main place in the operations of new organs. Instead of a huge USSR Gosagroprom the State Commission of the USSR Council of Ministers on Food and Procurements has been created.

The commission's main task is to effect the development of initiative among peasants in every way possible. Their living and work conditions must facilitate the achievement of maximum effectiveness in all production links. This will be served by legal documents which will secure various forms of property and of economic relations. The village is waiting to hear about laws concerning land, property, leasing and lease relations.

On the basis of a multi-sided analysis of the activities of the agroindustrial complex we must establish the strategy for its development and prepare large state programs to increase food volumes. These programs will begin to be based on the extensive introduction of the achievements of scientific and technical progress and on the more complete utilization of the special characteristics and possibilities for each region of the country.

In this work a fact that is being taken into consideration fully is that for decades the gap between the working and living conditions of the city resident and the peasant grew wider and that production and scientific potential was used poorly to solve food problems. It is not surprising that machine builders still have not been able to supply agriculture with the necessary complex of machines for fields, farms and processing enterprises. The quality of technology being manufactured for the village remains low although prices for it are constantly increasing.

Village social problems require more attention. Only about one-third of village houses are connected up to

networks of pipelines, centralized heating, hot water supply and sewage systems. Every two villages out of three do not have nurseries and kindergartens. And what is there to say about medical services in the village, which are incomparably worse than city services. Almost 40 percent of settlements and villages do not have stores. Average per capita income is also half that of the city.

Fairness requires that we admit that over a period of many years equivalent exchange between the city and the village has been violated. Price formation and the financial-credit system do not force enterprises and farms to seek the most effective solutions or to produce products with the least expenditures of labor, capital and material resources.

Today agriculture is the most credit-extended branch in the national economy. The proportion of long-term loans in the cost of fixed production capital comprises almost 20 percent. In industry and in other branches of the national economy the figure is 2.5 percent.

This situation cannot be tolerated. Already today a great deal is being done to alter the structure and direction of investments. A priority is being placed on processing branches, on the social sphere, on the building of roads and on gasification. Within the structure of investments being directed into expanding agricultural production, the proportion of investments into the active portion of funds, and into mechanization and automation of production processes is increasing. Here it is important to eliminate the misalignments that have been tolerated in recent years.

During the 13th Five-Year Plan capital investments for APK development will increase by 19 percent as compared to the plan for the current five years, whereas on the average in other branches of the national economy the figure will be 3 percent. The priority nature of the agricultural sphere of the economy is being manifested not only in the rapid pace of investment growth but also in the considerable growth in the participation of other complexes in technical reequipping and modernization of APK branches. For example, the country's machine building complex is directing 30.2 percent of the total volume of its production into APK development, the fuel and energy complex—28.1 percent, the metallurgical complex—31.8 percent, the chemical-timber industry—32.5 percent and the building enterprise—35 percent. In 1989-1995 the defense complex must produce technological equipment for industrial processing branches worth 16.5 billion rubles.

Supplies of material-technical resources to agriculture and other APK branches are increasing noticeably. In particular, there will be 19 percent more mineral fertilizer, 31 percent more agricultural technology for farming, and 29 percent more technology for livestock raising. The supply of technological equipment for the processing branches will increase by a factor of 2.3-2.5. This will enable us to accelerate the renewal of fixed production funds; moreover, within the processing

branches of the APK renewal will proceed faster by a factor of 2.5. Under these conditions it is especially important that everything that is allocated to the agroindustrial complex is utilized with maximum effectiveness.

What are the priority directions for increasing food resources during the 13th Five-Year Plan? Kolkhozes and sovkhozes will remain the main producers of agricultural products. In addition to them, other forms of land management will be extensively developed.

First we must mention leasing. This is a dependable way of developing and confirming the master of the land. It will unavoidably lead to the development of individual labor peasant enterprises, as is already being confirmed by the experience of a number of regions of the country. They should be placed on an equal economic footing with kolkhozes and sovkhozes. This is the way the March 1989 Plenum of the CPSU Central Committee looks at the question.

It is essential to note that family production does not presuppose the destruction of other forms of labor organization. The farm enterprise only supplements the many forms and variants of types of goods producers. Already today there could be more family farms. But the potential farmer is shaken by doubts: Will the transformation that is taking place last long? Will the flame of perestroika be extinguished? I think that it will not be extinguished if the corresponding laws are passed. Then village perestroika will definitely develop deep roots.

Solving the grain problem is not only an economic but a political question as well. In order to supply the country with grain products and livestock raising with forage by means of our own production it is essential to radically reexamine the structure of the arable land being used and to make it more precise with a consideration of increasing the grain field to 119-120 million hectares by 1992-1993. In connection with this we should reexamine investment policy in land reclamation and significantly increase feed production on natural lands. The assimilation of intensive technologies for cultivating grain crops should be a dependable factor in increasing grain production. All of the prerequisites exist for introducing such technologies on 60 million hectares by 1995 and on this basis for increasing productivity by an average of 6-7 quintals per hectare.

An important task faces field workers in the area of increasing production of vegetable oil and protein by means of increasing the area in oil-bearing crops to 10-12 million hectares. This can be done by means of expanding the area in rape, by increasing the gross yield of sunflowers on the basis of improving seed farming and the technology for cultivating it, and by the complete utilization of the possibilities of soybeans, Camelina and other oil-bearing crops. This path will allow us to curtail the procurement of vegetable oil from abroad and also to increase the effectiveness of using concentrated feeds.

In speaking about solving the food problem we cannot but mention improving nutrition for people. This will be aided by a transition to an economic and healthy structure for using products with a more extensive inclusion in food of vegetable resources, including thoroughly processed protein components in plants, by an increase in the share of vegetable oil within the structure of food fats and of products resulting from the processing of potatoes and vegetables, as well as by less feed-intensive livestock products.

A decrease in the output of feed in livestock raising will undoubtedly facilitate an improvement in the structure of the feed field. Here serious attention must be given to protein plants. After all, a lack of protein balance in feed results in an overexpenditure of up to 50 percent in forage energy, which is equivalent to 25-30 million tons of grain.

According to data of USSR Goskomstat [State Statistical Committee] each year about 29 million tons of cultivated grain does not reach storehouses, almost a million tons of meat is irretrievably lost and a fourth of the harvest of potatoes and vegetables does not reach the consumer. Scientists feel that each year 22-25 billion rubles are lost in such production. It is essential to eliminate such colossal losses. This must be facilitated by maintaining the quality of agricultural products at all stages of production, storage and processing. Above all this can be achieved by thorough processing and assimilation of new technologies, as well as by combatting mismanagement.

Finally it is time to complete the complex mechanization of harvest operations in terms of technical support of agriculture. With the organization of the serial production of the Don-1500 combine the technical level of grain-harvesting machinery has increased considerably. However, the problem of harvesting wet grain remains, as before. Awaiting a new solution is the problem of supplying the grain industry with drying and cleaning technology. With a consideration of the growing proportion of grain left in enterprise, the need for the delivery of such machines has increased by a factor of 1.5-2. This also refers to equipment for the thorough overall processing of grain into balanced mixed feeds. It is very important to organize the production and saturation of agriculture with a machine complex for cultivating oil-bearing crops and for processing them into oilseed cakes and oil, including directly in enterprises.

The shortage of food products in the country for a period of many years has been explained by the feed shortage. This is correct. Inadequate productivity and dependability of the feed-harvesting combines being produced at the present time force farmers to prolong the season for putting in silage and to begin harvesting the crop during the stage of milky ripeness. Due to the absence of modern feed-harvesting equipment, kolkhozes and sovkhoses are losing about 2 million tons of feed units and up to 3.5 million tons of dry substance due to the decrease in nutritive value of silage. For this reason the

assimilation in 1990 of a new generation of feed-harvesting combines is an important goal.

The technology for raising and harvesting potatoes that is used in our country does not secure stable production and in addition leads to significant losses of potatoes during the storage process. The foreign technologies that have been tested in the country eliminate these shortcomings. This is why equipping enterprises with a machine complex for cultivating, harvesting and storing potatoes and vegetables with the use of foreign experience is a priority. At the present time measures are being implemented to organize the reproduction of foreign machine analogues which have proven themselves well in testing.

Livestock raising remains labor-intensive and unpromising in many kolkhozes and sovkhoses. This is why during the 13th Five-Year Plan the overall mechanization of livestock farms and their full equipping with refrigeration equipment must be achieved.

This refers to small peasant farms and private subsidiary enterprises too. We cannot forget that today peasant gardens produce one-fourth of the total volume of agricultural products. In some republics the proportion of the private enterprise in total kolkhoz and sovkhos income reaches 40 percent. However, labor is mechanized extremely poorly here. This is why there must be a discussion about the need to produce hundreds of thousands of mini-tractors, motorized units, and milking and other apparatuses.

The discussion about developing a mechanism for the extensive utilization of the achievements of domestic and foreign science and progressive experience in practice is unique. Biotechnology, intensive resource-sparing technology in farming and livestock raising and in the processing of agricultural products, technical supply, electrification and automation of production, computer technology—this is what must become the full property of agroindustrial production. Increased interest in new knowledge is already being effected by means of expanding the network of scientific-production and production systems on the basis of the best enterprises, consultation points brought closer to kolkhozes and sovkhoses, demonstration objects, the improvement of propaganda and information and also the allocation of preferential credit for introductory operations.

In connection with this it is expedient to reexamine the forms and methods of training cadres, to increase the interest of workers in obtaining knowledge, and to reestablish the more effective methods, tested in practice, of intellectually stimulating labor activeness of rank and file workers, specialists and directors of production facilities.

While recognizing their vanguard role in solving the food problem, which today has become one of the most problematic areas in society, the army of many millions of village workers does not want to accept the technological and technical backwardness of production and the

social lack of organization of the village. The party and government are making efforts in this direction and are taking specific steps to solve the urgent problems of APK workers.

In agriculture it is customary that even on holidays the work and the future harvest are not forgotten. Thus, in analyzing the results of the past season in farming, it is important to take the necessary measures in all kolkhozes, sovkhoses and agroproms to create a firm foundation for next year's harvest. Some of the work in this direction has already been carried out. More winter crops than planned have been sown. Plowing has been carried out on practically the entire area. Work has

started everywhere to improve the quality of the seed fund. The preparation of tractors and soil cultivation and sowing machines for spring requires acceleration. Plowland poor in humus is awaiting good doses of organic fertilizers.

There can be no priority and secondary goals in solving the food problem. All of the problems are substantial and require a responsible attitude from those who are involved in the land and in field and farm products. Today as never before we need strict discipline based on awareness and the great obligation of every APK worker to create a full supply of food products in the country.

HOUSING, PERSONAL SERVICES

New Healthcare Structure Proposed

904D0041A Moscow TRUD in Russian 11 Jan 90 p 4

[Article by M. Krylov, Candidate in Technical Sciences: "A Proposal: More Profitable to Provide Better Medical Care"]

[Text] Our medicine is preparing to shift to economic management methods. The system of funding health care based on the number of residents in the district has been selected. If an oblast, for instance, has 1 million residents, then, given annual budgetary allocations of, say, R45 per person, it gets a total of R45 million from the budget. The funds will be spent on treatment and disease prevention, with the remainder given to doctors to spend independently, on salaries, building repairs, equipment, housing construction, etc.

But should experimentations in this area be considered finished? We do not think so. A discussion has begun in earnest on shifting to so-called insurance medicine, which in many forms is widely practiced in the West. From this point of view, this model of reorganizing and shifting medical care in the country to economic accountability may be useful.

On the one hand, I will speak as a patient, or a consumer, and, on the other, as a man of science, one who is used to analyzing facts and phenomena. Why are we unhappy with our medical care?

It is basically funded by the state budget and because of this is termed "free." But, as the proverb goes, there is no free lunch. The budget is funded mainly by levies on business activity of enterprises, which under economic accountability come directly from workers' pockets.

Moreover, this "for-pay" system is not managed well: accountability breaks down since funds disbursed by the treasury belong to no one. Fixed salaries of medics do not depend on results of their labor and provide no guarantee to the patient that he will get quality care. As to paid medical care, it is simply highway robbery since workers, having paid for medical care from their pockets, are now forced to pay once again to the self-financed clinic, the cooperative or the private practitioner, which violates the principle of social justice.

What is it that I propose? The money allocated to medical care should be given back to enterprises based on approximately R90 per employee annually. (This number is derived by dividing the proposed health care budget of R25 billion by the total population figure.) The money will comprise the fund for treating all members of the collective, but every person will have the exclusive right to make use of his share. As a rule, employees will not get this money in cash but will be able to transfer it through the bookkeeping department to the medical institution of their choice, where they will get treatment when they need it. Doctors will be paid only for days

when the employee is healthy and reports to work or is on vacation, with payments suspended automatically whenever he is unable to work. In special cases, such as during business trips, treatment funds could be paid to employees in cash and receipts for treatment honored at the payroll department, with the funds drawn from the annual medical allowance.

Funds to treat retirees will be transferred to social security offices and those to treat children to public education entities. Retirees will decide themselves how to use their share, while parents will make this choice for children below a certain age.

The clinic will issue its patient a standard book of coupons which will be submitted to the bookkeeping department of the enterprise, the sovkhoz or the kolkhoz, to the social security office, to the public education department, etc., for regular transfers of money to the clinic's account. Or else, patients could pay cash for treatment: they will pay the cashier at the clinic and the coupon book will be stamped accordingly. Other ways are possible as well, but the essence remains unchanged: all medical facilities will be self-financed and the patient will have the right to choose which one he wants to use.

Large labor collectives could establish their own medical facilities and maintain them at their expense, without however constraining their employees who should still have the right to be treated wherever they wish. The right to guaranteed medical care should entail freedom of choice, too.

Outpatient clinics and hospitals must be reorganized. There is no need to divide their functions. Any medical facility should provide all forms of treatment as well as the necessary specialization or universalization. This will be better for the patients and for the doctors. Naturally, once medical institutions become fully self-financed and self-managed, their labor collectives will decide all work-related issues themselves. Initially, medical institutions should get their facilities and equipment free.

Once clinics become independent, there will be no need for intermediary management structures and rayon, city and oblast health care departments will be abolished. The union and republic health care ministries will change their functions, too. They will continue to exercise control over treatment methods, professional qualification requirements and training and retraining of medical personnel, as well as assess, approve or reject new drugs and treatment methodologies and finance promising scientific research and academic science.

What are the advantages of the proposed model? The population will get a raise in their budgets and everyone will know how much his treatment costs. This will be a disciplining factor encouraging people to stay healthy. To promote the healthy way of life, clinics may reward non-smoking, non-drinking, athletic citizens who never fall ill by refunding them a portion of their money at year

end. Also, citizens, cooperatives and all other organizations may transfer to their clinic's account other funds, including money earmarked for special purposes such as for disposable hypodermic needles, thus protecting themselves from infection.

The number of employees at the clinics will fall, salaries will go up and the quality of care will rise: they will get as much as they earn and will treat people well, so as to keep patients from returning for additional treatment: poor treatment will not be profitable while good treatment will be. Referrals for a second opinion, to finish up treatment elsewhere or, for difficult patients, to see specialists will not be profitable since all those unprofessional activities will be paid for out of the clinic's own pocket.

Of course, the Ministry of Health Care will need a reserve fund to treat the chronically ill, for epidemics, natural disasters, etc.

Clearly, alongside the proposed model a small municipal health care network should also be retained, as well as ambulance services and a group of luminaries treating for cash. But I am convinced that a majority of citizens will prefer the health care model I have outlined here.

Military Add to Growing Housing Line in Kuybyshev

904D0029A Moscow KRASNAYA ZVEZDA in Russian
23 Nov 89 p 2

[Interview with A. Rodionov, chairman of Kuybyshev city ispolkom, by Lt. Col. O. Bedula: "What the Ispolkom Can Do"]

[Text] A large share of our editorial mail consists of letters from servicemen who have retired or shifted into the reserves, complaining of difficulties in getting housing and obtaining residency permits. One site of this disturbing situation is Kuybyshev.

Our correspondent, Lieutenant Colonel O. Bedula, met with A. Rodionov, chairman of the Kuybyshev city ispolkom and asked him to answer several questions.

[Question] Aleksey Ivanovich, why is it, in your opinion, that many KRASNAYA ZVEZDA readers find no words to describe the housing situation in Kuybyshev other than "critical"?

[Rodionov] Yes, the situation is difficult, although I wouldn't dramatize it. But those who decided to settle in Kuybyshev after military service must understand the situation. Currently, 132,000 families are on the waiting list for housing, of whom 7,135 are veterans and disabled veterans, family members of fallen soldiers and other Afghanistan veterans. Add to this 185 families of officers and warrant officers discharged into the reserves or retired. All these people have the right to expect their vital needs to be provided for on a priority basis, as we have a great debt to repay them. But it is simply impossible to provide housing for everyone at once.

[Question] In this case, it would seem that the Council of Ministers resolution "On Measures to Provide Better Housing to Officers, Warrant Officers and Extended Service Noncommissioned Officers Discharged into the Reserves or Retired," which was recently passed, exists only on paper, would it not?

[Rodionov] Let us be realistic. A timely resolution has been passed and the city ispolkom is doing everything to implement it. Whether or not it is enough is another matter. Capacity shortage at the RSFSR Ministry of Southern Construction is a constraint on the rate of housing construction in our city.

A very tight deadline has been set for providing housing to reserve officers and warrant officers. But let me remind you of another important document, the resolution of the USSR Council of Ministers and the AUCCTU "On Additional Measures to Improve the Living Conditions of War and Labor Veterans." That resolution also set a very tight deadline. Families of disabled and fallen soldiers on the waiting list since January 1, 1988, must get housing by 1991.

Last year, we were able to give only 273 apartments for the 1,487 eligible families. Meanwhile, 371 new families joined the waiting list; in other words, the waiting list grew. Most likely, this trend will not be reversed. By the end of the five-year plan, the most we will be able to do is to provide housing for 500 families. In short, even if we put all our reserves into action, we will not be able to carry out the two government resolutions simultaneously.

Due to the shift by enterprises and organizations to the new economic management system, the principles of paying for themselves and self-financing, they increasingly build housing using their own resources. This leads to changes in the structure of housing construction. The share of apartment houses built using central funds is declining. In other words, less housing is being built in the city of the type that provides apartments to war veterans, reserve officers and those who are still on active duty. For instance, our plan calls for 6,000 square meters of housing space to be allocated to the military district every year, but in 1987 we fell short of the target by 392 square meters, and in 1988 by 2,796 square meters. A similar quantity, if not more, will be lacking this year.

[Question] What is happening then, in your opinion?

[Rodionov] I see three solutions here. The first is to increase sharply housing construction using the resources of the Volga-Urals Military District. So far the reverse is in evidence. In 1986, military builders built over 24,000 square meters of housing, but the plan for next year calls for only one third as much. As to the quality of the buildings, very few people would move there voluntarily; they are forced to do so by the circumstances.

The second solution is to increase sharply the capacity of our main contractor, the territorial construction complex Kuybyshevstroy. To provide a private apartment for each family by the year 2000 we must build 900,000 square meters of housing each year, but so far we have been building only half as much, at most. To improve the situation, we are building a housing construction complex with the capacity to build 320,000 square meters of housing a year.

Finally, the third solution is to extend the existing norms for reserving housing units for government use not only to buildings built with central funds, but other funds as well. In this case, changes in the structure of housing construction will not affect apartments provided to servicemen, armed forces veterans, disabled veterans and families of fallen soldiers.

[Question] If I understand correctly, it is the last solution that will bring the quickest results.

[Rodionov] Naturally, since it does not require any additional capital investment. But do not delude yourself. Here is a quote from the minutes of the USSR Council of Ministers Presidium meeting, dated January 27, 1988: "The USSR Council of Ministers Presidium considers it useful to retain to the end of the current five-year plan period the existing regulations governing the transfer by enterprises, organizations and agencies of a share of housing in apartment houses built for them by local Soviet ispolkoms and other organizations, with the intent of completely eliminating the transfer of housing in the 13th five-year plan and replacing it with providing capital investments in the plan for housing construction using stable norms."

[Question] From now on, municipal authorities will be informed when an officer and his family are set to arrive to the city. Do you think that this will make the task of local soviets easier?

[Rodionov] Of course, it is important to know how many reserve officers will be coming to the city. But let me repeat that the drag is the low capacity of construction enterprises, including military ones. Here is a fresh example. Recently, 33 hectares of land has been freed after moving some military units out of the center of Kuybyshev. The ispolkom gave the entire territory to the military district to build housing. Commanders should speed up the resolution of this problem. So far, however, they have been moving slowly.

In short, we have a lot of work to do jointly with the commanders of the garrison and the district. Coordinated efforts would help us solve the housing problem, which is among the most urgent ones.

Editorial Comment. We can foresee that many of our readers, especially those who are directly concerned with the housing situation in Kuybyshev, will not be satisfied with this interview. To be frank, we are not fully satisfied either. While giving Comrade Rodionov his due for not hiding the problem, not making hasty promises and speaking honestly about existing difficulties, we must not forget that those who suffer without housing derive little satisfaction from their knowledge and understanding of the problems. This is why we feel it is imperative to state the newspaper's position directly and firmly. The government resolution has been passed and local authorities must do everything to implement it. Otherwise the question arises what the resolution is worth.

PERSONAL INCOME, SAVINGS

CIA Statistics Cited on US-USSR Well-Being

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[Editorial Report] Moscow MOSKOVSKAYA PRAVDA in Russian on 23 January 1990 carries on page 3 a 500-word article by A. Pakhomov entitled "Rubles and Dollars: What the CIA Thinks of Us." The article examines the discrepancy between US and Soviet statistics on average earned income.

Citing Goskomstat data, Pakhomov writes that the average earnings of Soviet workers in 1988 were R133 per month, or R1,596 per year. However, according to a 1989 CIA handbook on economic statistics, the average Soviet worker earned \$8,850 in 1988. Pakhomov explains the discrepancy by pointing out that CIA specialists do not compute their data based on the official exchange rate: "Their estimate is based on a comparison of the purchasing ability of US and Soviet citizens: how much each spends to acquire the same goods and enjoy the same services."

Pakhomov reports that the average American in 1988 received \$19,970 per year. According to the CIA study, among socialist countries only East German and Czechoslovak workers earned more than \$10,000.

The article also cites CIA data comparing average life expectancy, per capita energy consumption, and the number of automobiles in the USSR and the US. The author notes that in these changing times, "It's possible that even specialists at Langley are beginning to look more soberly at a number of things. Moreover, we too have become more tolerant of observations made about us if they are fair."

ELECTRIC POWER GENERATION

Nuclear Safety Official on Feasibility of Underground Plants

904E0040A Moscow SOTSIALISTICHESKAYA INDUSTRIYA in Russian 28 Dec 89 p 2

[Interview with V. Sidorenko, first deputy chairman of Gosatomenergondzor [State Committee for Safety in the Atomic Power Industry] by Yu. Medvedev: "Underground AESes: 'For' and 'Against'"]

[Text] The general public, enthusiastic about the proposal by some specialists to build underground AESes, sees this as a panacea to all the problems of nuclear power. Many are convinced that underground plants will eliminate the three main shortcomings of nuclear power. They will provide protection from external forces, sharply reduce radioactive emissions during serious accidents and simplify the entombment of decommissioned plants. Several institutes have been ordered to study the feasibility of PAESes [Underground AESes]. The first results are now being summarized. What are they? V. Sidorenko, first deputy chairman of Gosatomenergondzor, explains.

[V. Sidorenko] First of all, it is necessary to admit that we are repeating the experience of the West. Back in the 1970s a similar study was made in the United States; underground nuclear power plants were not deemed promising. I say this in all seriousness, as Americans acquainted us with their conclusions.

What is clear and unclear today? It has become obvious that an AES in its present form cannot be put underground. It is necessary to have fundamentally new equipment, differently arranged. It will be extremely difficult to produce this equipment. It will require huge sums and a lot of time. Even if we prove that PAESes are very beneficial and safe, dozens of years will be required for their mass introduction.

Now, as to what is unclear.

Hydrogeological conditions are unfavorable for PAESes. The main difficulty is groundwater and ground movement. These may increase the negative consequences of a serious accident. What about AES personnel? Where should they be, above or under the ground? In any case the personnel will be in extremely difficult situations.

Finally, will a PAES reduce emissions during a serious accident?

Although the plant is underground, it will be linked to the surface by tunnels, passageways, steam lines and the ventilation system. Also, there will be many cables and other communications systems. The total area of all such linkages to the surface is estimated to be hundreds of square meters. During an accident, radioactivity will escape to the surface through these channels. Nobody has yet proven that it will be less than for an accident on an above ground plant.

[Yu. Medvedev] However, the station can be isolated and communications shut off.

[V. Sidorenko] Unfortunately, this is an extremely difficult task. Of course, there is equipment to close transport tunnels. One can build devices to turn off pipes taking steam to turbines on the surface. However, there are cracks, gaps and voids. Their total area is measured in square centimeters, but this small area is sufficient for radiation to come to the surface in a serious accident.

[Yu. Medvedev] When discussing accidents at an AES, most people have in mind an explosion that no containment shell could hold. However, an underground plant would be stronger.

[V. Sidorenko] This is not true. If everything were so simple, one could in principle pile up a mountain over an AES and not have to put it underground.

[Yu. Medvedev] I assert again that it is easier to decommission a PAES.

[V. Sidorenko] Today there are different viewpoints about the fate of an AES after its service life is completed. The most intelligent alternative is to reuse the equipment and the area. Also, it should be kept in mind that one can not simply close off a PAES; its fuel rods must be removed, as they contain about 95 percent of the unspent uranium.

In principle, of course, one must study all directions. However, a basic work-up of a PAES design will cost millions of rubles. My experience shows that given the present acute situation in nuclear power, it is irrational to rush investments into underground stations. Such resources could be far more effectively used to improve safety at existing stations.

[Yu. Medvedev] Studies show that there is a very high probability that a Chernobyl-type accident can be repeated prior to the end of the century.

[V. Sidorenko] I agree, an accident can happen. But how great will the emissions be? This is the fundamental question. People are convinced that all serious accidents will become like Chernobyl. This is not so.

Reactor design itself should eliminate dangerous emissions even in the most serious accident. Now the entire world is designing just such reactors. In any case, the search for improved safety is now concentrated on PAESes. There are many unutilized reserves here. For example, throughout the world, calculations of accident probability do not include a rupture of the reactor. This is considered to be a very low probability event. However, in principle, one can build a reactor roof, designed for a rupture, in the gap between the reactor and the containment shell. In other words, it is not necessary to put the reactor underground in order to strengthen the design.

However, imagine that the recommendations of specialists are accepted, AESes are shut down and we actively

undertake the construction of underground plants. I am convinced that this will only be a breathing space to calm public opinion for a time. As soon as construction begins, there will be protests.

Recall what happened in Gorkiy, where it was proposed to build an atomic heat supply station. First our specialists announced: "We do not believe you; give us experts from the International Atomic Energy Agency." Foreigners arrived and concluded that the station was safe. They were not believed. Now it is said, "The station must be put underground." However, look what is happening in Semipalatinsk; there are protests against underground explosions.

[Yu. Medvedev] What do you think; is it at all possible to convince people that nuclear power is necessary?

[V. Sidorenko] At one meeting with French specialists, they said that no arguments can change the public's negative attitude towards nuclear power. This is useless. Public opinion can be moved only by life itself, by harsh necessity.

[Yu. Medvedev] One good winter, and everybody will be for nuclear power?

[V. Sidorenko] There is some sense to that. However, the English are opposed to this harsh formulation. They think that one must work with the public and explain things to it. I think that this is true. It is better if people make decisions with their eyes open.

[Yu. Medvedev] For many the main lesson of Chernobyl is that nuclear power is not for us. Given our standards of production, technology and production relations, we simply have not grown up enough for nuclear power plants.

[V. Sidorenko] The question, of course, is serious. But what about the chemical and biotechnology industries? Is modern agriculture dangerous because of mineral fertilizers? Should we sit and wait until somebody tells us: "OK, children, you are grown up enough for complicated technology." In my opinion, this is humiliating.

Essentially, then, perestroika should also cover nuclear power. The main goal of transformation is to finally begin to work well. Also, glasnost will make it possible for society to strictly control nuclear power plants.

Specialist Denies Post-Chernobyl Health Hazards Exist in Bryansk Oblast

904E0032A Moscow SOTSIALISTICHESKAYA
INDUSTRIYA in Russian 29 Nov 89 p 3

[Interview with Dmitriy Konstantinovich Popov, radiation chemist, by E. Mokhorov, in Bryansk Oblast: "After Chernobyl"; date not given]

[Text] Dmitriy Konstantinovich Popov is 65 years old. In the past, his fate was bound up with the testing of nuclear weapons. He is said to have been the first man

who went down into the crater immediately after an atomic bomb was exploded. From the standpoint of everyday common sense, there was no need to take that risk. The young radiochemist was drawn by scientific curiosity: he wanted to verify the correctness of one of his theoretical computations.

D. Popov is now a major authority in the country and abroad on the problems of global radioactive fallout. After the Chernobyl accident, he and Prof P. Ramzayev and other volunteers immediately took a dose of cesium in order to calibrate on themselves an instrument for measuring the level of radiation. Since that time, Popov, who is from Leningrad, has lived with his family in the city of Novozybkov in Bryansk Oblast. It is from there that a laboratory of the Leningrad Radiation Hygiene Institute makes observations of the state of health of the population in the zone of radioactive fallout.

Until recently, it was not the custom to mention in the central press the disaster area, which includes Bryansk Oblast, which has a population of 180,000.

In practice, this took the form of silence about an acute problem of vital importance to the population and had the result that 3 years after the Chernobyl accident a sensation occurred that was like a scandal in the amount of noise it created, and many millions of rubles were simply thrown to the wind.

Today, the taboo has been removed from the secret topic. A government commission recently created to repair the damage of the accident at the Chernobyl AES, headed by V. Doguzhiyev, deputy chairman of the USSR Council of Ministers, has studied the situation on the spot and outlined radical steps to extend assistance to the western rayons of Bryansk Oblast which were affected.

The chairman of the commission uttered an assessment of the situation in which there was no room, as it has been remarked, for "excessively optimistic attitudes."

Yet Dmitriy Konstantinovich preaches nothing but optimism. I remember one of his sentences: "The only special medical treatment the population here is in need of is psychotherapy."

I naturally thought of things I wanted to ask D. Popov.

[Mokhorov] I would like to remind you, Dmitriy Konstantinovich, that immediately before the arrival of the government commission you categorically stated in a conversation with me that nothing bad related to Chernobyl had happened in Bryansk Oblast at all, that this, you said, was an invention of dilettantes. I would also like to remind you of your assertion that in the rayons of Bryansk Oblast affected by radioactive fallout beneficial conditions as of a health resort have essentially been created in which people are receiving for free therapeutic doses of cesium, which is equivalent to the radon baths prescribed by physicians. I myself am a dilettante in these matters. I believe what I am told by an authoritative scientist, and for that reason my questions to you

will be based solely on the rumors that are widespread among the local population. Although, to be honest, after the conclusion arrived at by the government commission, even I have had certain incipient doubts. The commission, whose members included competent specialists from USSR Minzdrav, the State Committee for Hydrometeorology, and scientists from your institute, came to the conclusion that 24 settlements in Bryansk Oblast have to be evacuated. What can you tell us concerning the decisions taken?

[Popov] I am absolutely convinced: the radiation in Bryansk Oblast does not represent even the slightest danger to human health. I consider the evacuation decision scientifically unsound. The atmosphere that came about because of the ignorant actions of the local medical service played a role here. People are extremely frightened.

[Mokhorov] What were the physicians guilty of?

[Popov] They instituted a great number of absurd bans, above all concerning so-called contaminated foodstuffs. Milk was rejected if the cesium concentration in it exceeded the temporary permissible conditions. Even though there were no dangerous doses at all.

[Mokhorov] How, then, are we to understand the recent articles in the local press reporting that they were accepting for processing at the Bryansk Meat Combine carcasses with a cesium content exceeding the maximum permissible concentrations tenfold? Sometimes, if they don't manage to sell this meat on the sly to some remote area of the country, they intentionally let it spoil only so that they can write it off afterward.

[Popov] That is a crime. The people have nothing to eat, and here they are deliberately letting meat spoil, whereas it could be processed according to the recommended technology, diluted with clean meat and components, and put on the worker's table.

[Mokhorov] But then how do you explain that in Bryansk Oblast there has been a sharp rise in the number of cases of disease in the last 3 years, including oncological cases?

[Popov] Yes, as a matter of fact, there has been a rise in many diseases, including diseases of the digestive organs, the thyroid gland, and the cardiovascular and nervous systems. There is one diagnosis here—mass radiophobia. They have frightened the people, they have forbidden them to drink milk, to eat meat, vegetables, and fruit, to gather wild berries and mushrooms. Here is a typical case. In the settlement of Vyshkov, the local inhabitants put this question to me: They write in the newspaper, they said, that we need to eat more lemons; this helps to drive the cesium out of the organism more rapidly. But why do they not deliver lemons to the store?

I answered them: "Friends, why don't you eat apples and pears from your own orchard? The harm from negligible doses of cesium simply cannot be compared to the

immense benefit from those vitamins which are contained in fruit and berries. You should eat everything you have and not wait for lemons and oranges to come from Africa. Believe me, fruit from overseas is not a bit more beneficial than our own!"

When you constantly tell a man: "The milk and meat are contaminated, the honey cannot be eaten, do not go into the woods, do not gather mushrooms," then he involuntarily succumbs to panic. People limit themselves in all respects, including their food rich in vitamins, the organism gets weak, avitaminosis ensues, and as a consequence you have widespread disease. And that means more fear and uncertainty.... The first thing that should be done is to remove all the bans. The temporary permissible conditions for foodstuffs established by Minzdrav should be rescinded. Public health physicians should be forbidden to reject food without our institute's consent.

[Mokhorov] Before Chernobyl, Bryansk Oblast was one of the major suppliers of meat, milk, potatoes, and vegetables to the capital. Leningrad also consumed potatoes from Bryansk. But now the deliveries have been cut back sharply. This has been extremely disturbing to the local population. In meetings with the government commission, this question was frequently heard: "Why is Moscow not accepting products from the contaminated regions, and yet we eat them? Are we second-class people?"

[Popov] I explain things like that in terms of the incompetence of the public health service in Moscow. The mere name "Bryansk Oblast" affects the officials like a red cloth affects a bull. For example, a freight train of potatoes arrived. There was, of course, dirt on them. The dosimetrists did not take this into account. They lowered their instrument into the car, the indicator went off scale: Aha! Contaminated, it has to be rejected! And they rejected it. Until last year, the capital went without potatoes because of ignorance. And it took no small effort on our part to prove that the cesium content in the potatoes themselves was practically zero. The dirt simply has to be washed off, as every housewife does, before peeling the potato. I think that in these 3 years the esteemed physicians had a simple duty to look at the literature on radiology available to everyone, and study the subject so as to have an opinion of their own. But it was simpler to act in accordance with the instruction. Although at some points it is illiterate. I am convinced that in the near future the people of Moscow will again be getting their Bryansk cheeses, cottage cheese, butter milk, and sour cream. Let them eat to their heart's content! The temporary permissible conditions established by USSR Minzdrav should be retained only for the western rayons of Bryansk Oblast, where there is an external radiation background. In Moscow and Leningrad, however, there is no external radiation at all, and if the inhabitants of these cities drink milk and eat meat containing cesium that is twice as high as the standard,

the Muscovite's annual dose of radiation will be within limits which cannot by any means have an effect on the way he feels and his health.

The unwarranted bans on milk—was that thrifty? It would be simpler to issue the order today to do away with the livestock in the contaminated areas. And tomorrow we will be biting our elbows. People have anyway lost the habit of working, they don't want to raise cows or keep a garden. And why, if in accordance with the instruction, all farm products, including meat and milk, are brought directly from the "clean" areas to the store, and this is moreover done in cellophane wrapping?

[Mokhorov] The inhabitants of the contaminated rayons of Bryansk Oblast regularly watch the programs of Belorussian Television and learn about the immense effort being made in the neighboring republic to repair the damage of Chernobyl. The population is broadly informed about the radiation situation, the newspapers have been printing maps indicating radiation levels. In our case, all of that was kept strictly secret for a long time. In the neighboring republic, research into the problems related to radiation is being carried on by 38 scientific research institutions, headed by the republic academy of sciences. In Bryansk Oblast, there is a monopoly held by your institute, or more accurately—by the scientific school headed by Prof P. Ramzayev. The problem of radiation in Bryansk Oblast has essentially been covered up for 3 years. Isn't that the reason for much of the trouble we are talking about now?

[Popov] There are only two scientific institutions in the country competent in problems of radiology—our institute in Leningrad and the Moscow Institute of Biophysics. The authority of these scientific schools is recognized all over the world. The conclusions we drew concerning the consequences of the Chernobyl accident have been confirmed by representatives of international organizations. At the same time, foreign scientists were shocked at the ignorance of radiology of scientists at the Belorussian Academy of Sciences. There seems to be more political marketing, more of a drive to gain the authority of the crowd in a rally, than real science. The medical institutions? Yes, there is a place for them, but in the situation that has come about there is nothing for them to do. The large-scale influx of physicians has been something that frightened the already extremely disturbed inhabitants. This is grist for the mill of radiophobia.

[Mokhorov] Charges have also been addressed to Professor Ramzayev. Your school was formed back in the fifties and early sixties at the height of the nuclear weapons tests. Did the historical circumstances of that time, the atomic euphoria, not leave an imprint on the views and principles of the Ramzayev school? Amidst the dust raised by the debate, certain hotheads have called the professor a representative of situational science. There is a widespread rumor in the population: The state, it is said, does not have the money to move the

affected cities and villages, which is why the decision was made to save billions on lives and health with Ramzayev's help.

[Popov] As far as investments running into the millions are concerned, along with the large and useful effort that has been made here, resources are as a matter of fact being thrown to the winds. And as for Pavel Vasilyevich Ramzayev, he is a serious scientist whose opinion is heeded the world over. Unfortunately, the pages of many popular publications have been turned over to rampant ignorance. It has become far more difficult for men of science to express themselves. Almost all the newspapers refuse to print Professor Ramzayev's article.

[Mokhorov] Are there specialists and scientists in the country who hold views of the Chernobyl problem different from the followers of the Ramzayev school?

[Popov] Our views are not shared by all, of course, not even in the institute itself. Different positions are taken, for example, by Professor Gusev. These scientists believe that it is better to be overinsured than underinsured.

But if the rumors attribute to us the "crime" of wanting to return to society valuable foodstuffs, millions of rubles lost because of ignorance and indifference (for example, removing the fertile layer of the soil around settlements), then those rumors correspond fully to reality. We are standing watch over people's health and their interests.

Note From the Editors

Let us be frank, the position firmly held by the scientists is unusual for us. What is more, it evokes an inner protest. Which is natural—Chernobyl was too unexpected and terrible, we were too unprepared for anything of the kind, including even morally; we lost too much and we experienced too much in the disaster that befell us. How difficult it is for us to get to the truth....

In the city of Novozybkov, which is where the Leningrad laboratory is located, plants have in a short time lost one-fourth of their skilled workers and specialists. People are leaving behind their jobs, home, their native area, and they are rushing into the unknown. Often the occasion for flight is the absurd instruction prescribing that potatoes not be allowed to come into contact with the soil when they had been dug out of that same soil, or it was even the fact that meat products have regularly appeared on the shelves of local stores, which previously, before Chernobyl, had never been the case here.

People who have been suffering from rumors, from uncertainty, have an acute need for competent information. The taboo has now been removed from the prohibited topic. But even the one-sided glasnost, when only journalists and writers appear in the press, and the specialists are silent, which has replaced the dead silence, does not satisfy anyone. Professor Ramzayev, a scientist with a world name, cannot present his position and views in a single popular Soviet newspaper. This is just

as bad as the fact that his opponents, who have a differing point of view, are not appearing in the press.

Whatever the truth may be—bitter or encouraging—we will never get closer to it through discussions that have a rally flavor. In publishing the interview with Popov, we are inviting other competent scientists and specialists to talk about the problems of the affected rayons.

PIPELINE CONSTRUCTION, OPERATION

UDC 621.867.8:621.869.8

'Ural-1' Coal Haulage System Detailed

904E0046A Moscow UGOL in Russian
No 11, Nov 89 p 33

[Article by engineer O.V. Vityazev of Uralgiproskhakht [Urals State Institute for the Planning of Mines]: "A Special New Form of Transport for Coal Shipments"]

[Text] Special new types of transport (light conveyor, suspension cable, hydraulic and pneumatic container transport, among others) have been created and perfected over the last 20 years and have come to be employed more and more widely for the shipment of free-flowing bulk freights (coal, ore, crushed rock and sand, among others) over distances of up to 200 km [kilometers] or more. It is not efficient to use rail transport for such "short runs." The cost of such shipments using rail transport doubles at a transport distance of 200 km, triples at 100 km, is five times greater at 50 km and is more than 17 times more expensive at 10 km than the costs at the average system-wide shipping distance, according to the data of VNIPTmash [All-Union Scientific Research, Planning and Design Institute of Materials-Handling Machinery and Equipment].

It is, meanwhile, just such movements that comprise the major portion of the operations of rail transport: almost 40 percent of the overall shipping volume (in tons) is performed at distances of less than 200 km, and over 25 percent at distances of less than 100 km. Even the partial switching of short-haul shipping to special types of transport would consequently provide an extremely substantial national-economic impact, including in the coal industry. We note that such a switchover is particularly expedient for stretches of railroad that have essentially become process paths between neighboring producing (mines) and processing (enrichment mills) enterprises. Pneumatic pipeline container transport is one such new form of transport.

The technical and economic substantiation for the construction of the Ural-1 pneumatic container transport system—for the shipment of 2.8 million tons of crushed rock a year from the mill under construction at the

Uralasbest Combine to Sverdlovsk plants for reinforced-concrete items and large-panel housing construction—has been developed by Uralgiproskhakht in conjunction with the Transprogress industrial association. The technical solutions of the institute were reviewed and approved by USSR Ministroymaterialov [Ministry of the Construction Materials Industry] and USSR Gosplan. The further execution of working documentation has been curtailed in connection with the fact that the construction of the mill has been put on hold.

The calculations that were performed, however, showed that the system of pneumatic container transport is entirely competitive with traditional types of transport—railroad and truck—for the shipment of bulk free-flowing freights (coal, crushed rock, sand etc.).

The technical and economic indicators for the Ural-1 pneumatic pipeline container transport system are presented below:

Annual shipment volume, thousands of tons	2,800
Transport distance, km	63
Number of workdays per year	330
Number of shifts per day	3
Number of workers	60-65
Annual labor productivity per worker, support personnel, thousands of tons	45.2
Shipping cost, kopecks/ton-km	2.7
Payback period for capital investment, years	7

The Ural-1 system has two parallel pipelines 1,220 mm [millimeters] in diameter; the freight containers move along one of them, and the empties move in the opposite direction along the other. All of the elements of the system operate in automatic mode from the loading system through unloading. One dispatcher controls system operation.

The Ural-1 system provides an annual economic impact of about 5 million rubles compared to the delivery of crushed rock by railroad. The fact that these calculations were performed for commercial-test equipment—the cost of which is considerably greater than series-produced equipment—should be taken into account. This system has no harmful effects on the environment and can operate within temperature fluctuations of minus to plus 40 degrees Celsius.

An analysis of shipping and traffic-flow conditions for bulk free-flowing freights across Sverdlovsk and Perm oblasts that was performed by Uralgiproskhakht shows that the high productivity of the system is especially important for those regions where a shortage of labor resources is being felt.

Difficulties are encountered in the incorporation of pneumatic container transport that are caused first and foremost by the very novelty of this type of transport, since it causes many unaccustomed concerns in operation at first, while the operational practices of traditional

forms of transport (railroad and trucking) are well known and have been well worked out.

The development of a general scheme for the development of pneumatic container transport in a region for a period of no less than fifteen years is one of the first steps in its comprehensive incorporation in the coal industry. Technical and economic calculations substantiating the expediency of employing pneumatic container transport systems for coal (or crushed rock, sand etc.) shipments and determining their cost and time periods for construction are

essential. The design engineering and construction of pneumatic container transport systems for enterprises of the coal industry should also be accomplished on the basis of such a scheme. The resolution of the issue of employing this form of transport requires an attentive attitude toward it and support for it on the part of both organizations with a vested interest and on the part of planning bodies.

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UzSSR Seeks To Cure Fergana Valley Unemployment Problem

90US0242A Tashkent PRAVDA VOSTOKA in Russian
4 Nov 89 p 1

[Unattributed report: "Speeding Up the Social Development of the Fergana Valley"]

[Text] It was noted in the USSR Council of Ministers decree adopted 28 October that for a long time the urgent problems of the social development of the Fergana valley have not been resolved. The population's immediate needs are not being satisfied. The material basis of the non-production sphere is badly lagging. The consumption of basic foodstuffs remains extremely low. The situation is exacerbated by uninterrupted growth in the size of the population (especially of the rural population) not employed in public production.

The decree states that the situation which has been created is the result of shortcomings which have been allowed by the Uzbek SSR Council of Ministers in the management of the national economy and the development of the republic's productive forces. The narrowly departmental approach of the union ministries and departments which did not concern themselves with the creation of a social infrastructure also played an unseemly role. The natural result was the manifestation of dissatisfaction on the part of a significant portion of the population.

Immediate measures are now needed in order to effectively resolve the acute social problems of the Fergana valley. It is above all necessary to guarantee its thousands of residents stable work and growth in real income, and to eliminate as rapidly as possible the consequences of the well-known events in Andizhan, Namangan, and Fergana oblasts. These are the measures intended by the USSR Council of Ministers.

In noting that single-minded work is now being carried out in Uzbekistan for the recovery of the socioeconomic situation in the valley, conditions are being created for stabilizing the situation; the USSR Council of Ministers adopted the republic's proposal on accelerating the construction of a number of light industrial facilities, and work on them will commence not in the next 5-year plan, but in 1990. The Kirovskaya cotton wadding factory and the Yangikurganskaya knitwear factory in Fergana Oblast, and the knitted outerwear factory in the village of Shakhand, Namangan Oblast must come on line in 1991-1992. They will be built by Uzbekistan's Gosagroprom and Gosstroy.

From 65,000 to 70,000 people will also be able to find work at the enterprises in operation in three oblasts—if the existing capacities are loaded as they should be, and the shift coefficient is raised. On this score, the Uzbek government in conjunction with the union ministries and departments developed measures approved by the USSR Council of Ministers. Even in 1989-1990, about

14,000 new work positions should be created by these means, with a growth in production output of R116.7 million annually.

One more very long-term means of increasing employment is the creation in cities and villages of small enterprises, branches, and shops for turning out science-intensive and labor-intensive productions. Together with the Uzbek government, the following union ministries will be concerned with this from 1989-1991: the electronic, defense, electro-electronic, radio and communications, chemical, and petroleum processing industries. For example, the Ministry of the Defense Industry will, with its technical culture and resources, assist in expanding production of consumer goods, as well as with equipment for this branch, for example, in Namangan and Kokand (the expansion of the "Kokandtekstil'mash" plant). New electronics industry plants will emerge, and old plants expanded in Leninsk, Chust, Besharyk, Yaypan, and Kuva. The development of the "Uzelektroterm" leading plant in Namangan, the "Algoritm" plant branch in Tashbulak, the radioelectronic service and repair center in Kuva, and the national galoshes shop at the "Fergananeftorsintez" association will be speeded up.

This must yield over 5,000 working positions in the coming 2-3 years. The Uzbek SSR Council of Ministers is entrusted to allocate the corresponding limits on contract work at the sites indicated.

Deputy I. Karimov, first secretary of the Uzbek CP Central Committee, recently spoke at a USSR Supreme Soviet session of the need to fortify in the republic the development of individual housing construction with funds and resources. This is not a simple problem: everyone knows how meager and tense the country's budget is. Yet all the same, the union Government has ordered USSR Gosplan to increase in 1990 earmarked credit resources for individual housing construction in Andizhan, Namangan, and Fergana oblasts. USSR Sberbank must ensure the issuance of loans for these purposes upon the population's application.

In addition to the state sector, the cooperatives are contributing to the resolution of the valley's social problems. In 1990, Tsentrosoyuz envisages the construction here of 35 facilities for producing goods for the people. These are small enterprises, yet ones necessary for improving the villagers everyday life. These are non-alcoholic bottling lines, ice cream production, conserved foods shops for container filling (approximately 1-3 million cans annually), confectionery and sausage-stuffing lines, sewing and joining shops, and small bakeries with their own bread stores.

The planned program will require a significant strengthening of the construction base. USSR Gosplan and the Ministry of Finances must consider the matter of allocating supplementary capital investments in these facilities for 1990, and present its proposals to the union Government. In addition, the USSR Ministry of Finance

must consider the matter of allocating an supplemental R100 million for reconstruction work in Andizhan, Namangan, and Fergana oblasts.

Uzbek SSR: Unemployment, Need for Skilled Labor in Namangan Oblast Contrasted

90US0242B Tashkent PRAVDA VOSTOKA in Russian
15 Nov 89 p 1

[Report by UzTAG correspondent N. Khodzhayeva: "A Deficit During a Surplus: Not 'Just Workers,' but Well-Trained Worker Cadres are Required"]

[Text] Pamphlets, appeals, and posters with the word "required" and a detailed list of work specialties can be seen practically in every corner of Namangan Oblast. But it seems strange: How can this be? We speak of unemployment, but at the same time, there are not enough workers?

To Train Them From the School Bench

There are no contradictions here. This is how Abduvakhib Absusamatov, the director of the oblast center for the population's labor resources, retraining, and professional orientation explained it:

"The surplus of the able-bodied population is still not a guarantee for covering a deficit of working hands. The majority of those seeking work do not have, as they say, anything to offer, other than the scanty knowledge received in school, and the desire to be set up with work. But the factories and plants need people who have at least some small command of the basics of their future specialty, who have an idea of what that is."

According to recent data, 1,462 working positions are vacant in the oblast. There are several times more that number seeking work. But again, vacancies cannot be filled within an hour. Of course, some little position will be found for the versatile worker. But first and foremost, workers of certain specialties are needed. These are qualified stone workers, plasterers, painters, welders, secretary-typists, bookkeepers, economists, and people of the various professions. There is no one even to train youth.

At the same time this does not mean that setting up the population with jobs presents a problem which cannot be solved. According to the statistics for 9 months, of the 18,555 people registered in the center, 17,947 were provided with work. The remaining clients were either dissatisfied with the positions offered, or did not themselves possess the necessary qualifications.

There are a great many people in Namangan Oblast who do not have work. By first approximate estimates, there are over 60,000 of them. So here, the measures planned by decree of the USSR Council of Ministers to increase the population's employment are considered to be very timely, and are heartily approved.

"However, in my opinion, we should not begin with new industrial construction, but by expanding existing enterprises, putting them under a full load," feels A. Abdusamatov. "In fact, such a path is planned in the union Government's decree as the most long-range one. And not in vain: The development of the functioning factories and plants is a major reserve for involving even more people in production. Keeping this goal in mind, we must be concerned with inculcating kids with the elementary skills necessary for the valley's industry even while they are learning in school. Then the profession titles on the information lists that begin with 'required' will not be alien to them..."

When There Are Not Enough Capable Hands

Exactly a year has passed since the Namangan footwear factory received association status. How much has this improved the utilization of labor resources? Here is the opinion of general director Akhmadali Akbarov:

"From an enterprise which aimed at turning out primarily women's and men's fashion footwear, we are turning into purveyors of a broad assortment."

Even so, returns of almost all product types are coming in.

High quality products cannot be achieved because of the workers' poor qualifications. Mentors, experienced engineers, and foremen are needed to teach the workers. There is an acute shortage of them. Housing for specialists has already been constructed at the expense of share participation together with the gorispolkom OKC [oblast construction commission]. But even that does not help attract the necessary cadres...

On the other hand, of course, expanded assortments have helped to employ more than a few people. But all the same, the fully-qualified cadres are not there. The staff shortfall at a leading enterprise is 70-80 people. Only 65 percent of the capacity of the Tashbulakskiy branch has been assimilated. The training of 30 workers for the Kasansayskiy branch has begun. They will come into production in the near future—the branch's introduction is planned for December. With time, they will acquire the skills, but when?

In a word, the association's capacities are growing day by day. The population, especially the rural population, is satisfied that production lines requiring a work force are being added in their area. All of this is very good, but under one condition—production must be provided with a sufficient supply of literate working cadres. "We do not have this," said the general director. "The shortage of engineering-technical personnel is especially keenly felt in the rural areas."

And as a result, the production of really high-quality footwear is not always achieved.

They have tangled with this problem for a long time now. They have appealed to various departments for assistance, yet the situation has hardly changed.

Yes, it is possible and necessary to create more work positions. Yet in no case should we lose sight of such an important task as preparing the appropriate conditions, among which providing future production with qualified cadres is in the first place.

Letter to AUCCTU Chairman Defends Cooperatives

904F0036A Moscow OGONEK in Russian
No 44, 28 Oct 89-4 Nov 89 p 4

[Open letter by A. Fedorov, chairman of the board, Moscow Union of Cooperatives: "An Open Letter to AUCCTU Chairman S.A. Shalayev"]

[Text]

Esteemed Stepan Alekseyevich!

I probably should have addressed you earlier, immediately after the AUCCTU Plenum, which took place a month and a half ago. But I wanted to speak with figures in hand, and it took time to obtain them. Let me say straight off that the cooperative members of Moscow, whom I represent, followed the course of this plenum with particular interest and read your report carefully. Our interest is understandable: previously we merely sensed that the public atmosphere was saturated with dissatisfaction. The cooperative movement had its opponents since its very inception. But inasmuch as the government had declared that it was in support of the cooperative movement with all possible measures, the struggle against this movement was conducted covertly, in a guerrilla-like manner, if I may so express it. Our opponents had to refine their methods—for example, like those of the racists in the United States. There, I have heard, inflaming ethnic discord is punishable by death. Therefore, wishing to discredit the Negro population, some persons use the following device, for example. Let's say, a white man steals a fur coat; it is stated that John Smith stole the coat. But if it happens that a black man stole such a coat, it is stated that it was stolen by a Negro. And that's the way it is here in our country in the case of cooperative members. A man may make a serious error, but if he is a cooperative member, it is mandatory that the emphasis be placed on this factor.

When the trade-union leaders entered the arena of struggle against the cooperative members, they rejected such refinements. Why bother with them? Your like-minded colleague and leader in trade-union work, the chairman of the MGSPS [Moscow City Trade-Union Council], V.P. Shcherbakov, when speaking at the Congress of People's Deputies, asserted with Bolshevik directness that the activity of cooperative members "is exacerbating the shortage of goods, emptying the store shelves, as well as increasing corruption, bribery, profiteering, and the growth of organized crime." How were

the people supposed to react to the portrait of such a monster? They reacted in the way which was counted on.

It's all well and good to say that the cooperative movement has committed some sins. But can a mama ill with AIDS give birth to a healthy child? So too our economic-political system was hardly capable of bringing an ideal child into the world. Are you seriously convinced that it is specifically the cooperative movement which is to blame for empty store shelves and counters? That same cooperative movement which accounts for only one percent of the products being produced in this country? And that it is we who have corrupted young people and caused the increase in crime which is to be observed nowadays? Or could it be that cooperative members are the most convenient target these days for those persons who are seeking an answer to the age-old question on the minds of Russians: Who is to blame? At one time the aristocracy was blamed, then the intelligentsia, the peasants, the cosmopolitans, the dissidents, the Jews, and the aliens.... It's interesting to speculate that, if we cooperative members had not been around, whom would you have blamed?

I am not at all offended by those people who have been suggesting for decades that it is immoral to be rich, that trade and thievery are one and the same thing, that to wear out the seat of one's pants at work, while receiving merely kopecks, is a worthy occupation for human beings, but to earn good money is shameful. People had not been psychologically prepared for the appearance of cooperatives—so what kind of attitude could have been expected? But you, the trade-union leaders, didn't you consciously decide in the fifth year of perestroika to play upon people's moods? It is very convenient, by fanning the flames of anti-cooperative passions, to demonstrate to the people your concern for its interests and well-being.

You hurled not just unsubstantiated opinion but also figures at a prepared, "preheated," public opinion. Citing data of the MGSPS, you directly stated at the plenum that, during the first seven months of the current year alone, Moscow's cooperatives withdrew from its own accounts in this city's banks some 1,602,000,000 rubles and returned only 58,500,000 rubles. How were people supposed to understand these figures? In only one way. They withdrew a lot and returned little; therefore, the difference remained in the pockets of the cooperative members. (By the way, the Moscow Union of Cooperatives conducted a poll at several enterprises—and that is precisely how people did understand it: somehow the cooperative members "abducted" R1.5 billion).

Now let me ask, Stepan Alekseyevich, what you had in mind when speaking about the "withdrawal of money by cooperative members from their own accounts"? I must admit that we thought about it, tried to puzzle it out, but just could not understand it. If it was from their own accounts, then why was it withdrawn? If the accounts are their own, does that mean that this money belongs to the cooperative members? If you had in mind the earnings of the Moscow cooperative members for the seven months in question, then your figure, you'll forgive me for saying

so, is incorrect. In reality, it is almost a billion more and amounts to 2,522,100,000 rubles. In the language of economic management this figure is designated as goods exchange or the income derived from the sales of produced goods and services.

Allow me to give you satisfaction, Stepan Alekseyevich: after all, it is so pleasant to count someone else's money in someone else's pocket. After we perform a little arithmetic, you will learn into whose pockets the funds withdrawn from the banks wound up. Let me remind you of the figure: 2.5 billion.

And so, let's begin. 1,107,300,000 rubles went for material expenditures. Raw materials and equipment, deductions contributed to the state social security insurance system, payments to various outside organizations for services without which we could not get by, expenses for transportation and business trips, interest payments for the use of credit; we are also including here sums contributed for beneficial goals. In order not to trouble you, I shall not cite each figure article by article. If you desire such details, you yourself can request this data from the appropriate organs.

Now about real income—that sum-total which is subject to taxation. For Moscow this sum amounted to 1,414,800,000 rubles. By way of taxes the city received approximately 48 million. A relatively small amount, of course, but are we really the ones who determine the tax policy? Are we really supposed to have the skills of the financial experts, who at first set the tax rate for all the cooperative members lumped together at 3-5-10 percent, while nowadays—in a fright—they are proposing 20-40-60 percent?

The income was utilized in the following fashion. Some 257,600,000 rubles went to the fund for development. Enterprises must be expanded, built, and new equipment must be purchased—I think that this is understandable. I myself am getting tired of these figures, so let me summarize them briefly: about another 99 million went to the insurance fund and to amortize credits. That is, we did not take this money for ourselves but contributed it. Are you keeping track of the arithmetic?

Thus we have come to the most interesting figure: the wage fund. This amounted to 845,900,000 rubles. And so we have laid everything out and computed it; now we will perform the dividing operations. First, by seven, i.e., by the number of months during which this money was earned. And then, by 300,000 (this, according to data provided by the Moscow City Soviet, is the number of cooperative members working in Moscow). How much does that come to on an average? Slightly more than 400 rubles per person per month. Not too bad, of course, but neither is it too much these days. I have not mentioned the one percent deducted and contributed to the trade unions, but this amounts to something like 8.5 million rubles.

In any case, the figures produce not such a stunning impression as those in your report. By the way, you added there that the 384 million rubles "which the cooperative members withdrew during the month of June were equal to

one-third of the wage fund of all working Moscow." What is the meaning or intent of this comparison? Could it be that we have inflicted some damage, albeit by a kopeck's worth, to the wages of working Moscow? And why, despite the obvious inaccuracy of such a comparison, does it still make an impression? Perhaps because it contains an obvious contrast: it turns out that all of Moscow, except for the cooperative members, is working. There is only one conclusion: people are working, but cooperative members cheat, profiteer and grow rich on the Fatherland's misfortunes. How is it necessary to treat such people as these cooperative members?

Here, Stepan Alekseyevich, I give you your due. A month after your speech defending the people from the cooperative members I attended a meeting which had been organized in Luzhniki by your like-minded associates from the MGSPS. I understood that many persons (not without help of bureaucrats from the trade unions) had found the answer to the question: Who is to blame? You, of course, are familiar with the slogans displayed at this meeting: "Down with Cooperatives, Plunderers of the People!", "It's Time To Investigate Those Who Thought Up Cooperatives," "We Do Not Need a Government Which Supports the Profiteering Cooperative Movement." I counted 362 such posters there.

Please forgive me for citing one more figure, but I know that a person must be precise with you. The last line in my financial declaration is the sum-total of the cooperatives' free assets, which amounts to 171 million rubles. Fearing the forced closure of accounts in certain state banks, the cooperatives placed the principal portion of this money in their personal accounts at savings banks, thereby increasing by 140 million rubles the total money which people do not have to spend on anything. By the way, during the first seven months of this year some 800 million rubles of unsatisfied demand "fell" into Moscow's savings banks. With a careful accounting we come up with a residual figure of 31 million rubles in free assets. Where is it? This money is not around, Stepan Alekseyevich. Excuse my lack of restraint, but it went to bribe various kinds of state and non-state persons. You yourself understand that it was taken out of pockets and not in accordance with the good will of cooperative members.

Such is an accounting of the income and expenditures. And I think: Why, in speaking from an All-Union rostrum, did you have to utilize false figures when, by turning to organs well-known to you, you could have ascertained the real ones? Could it be that this was an error? Or did you place too much trust in the information obtained from the MGSPS?

Nevertheless, having given this matter some thought, I've come to the following conclusion: No, it's most likely not a matter of an error or of excessive trust. But, then, what is it, esteemed Stepan Alekseyevich?

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INTERSECTOR NETWORK DEVELOPMENT

Moscow City Transport Issues Examined

904H0043A Moscow MOSKOVSKAYA PRAVDA in Russian 14, 15 Oct 89 pp 1-2

[Report on session of Moscow City Soviet of People's Deputies: "The Deputies Are Concerned About Transportation"]

[14 Oct 89, pp 1-2]

[Text] The 10th Session, 20th Convocation, of the Moscow City Soviet of People's Deputies was held yesterday in the Social and Political Center of the MGK and MK KPSS [Moscow City and Moscow Oblast Committees of the CPSU].

The session was opened by Deputy V. T. Saykin, chairman of the Moscow Soviet Ispolkom.

The session paid homage to the memory of the late deputy and deputy chairman of the Moscow Soviet Ispolkom, A. M. Storozhinskiy.

Deputy V. G. Inozemtsev, rector of the Moscow Institute of Railroad Transport Engineers, was elected chairman of the session, and Deputy P. V. Yeliseyeva, transport engineer for Interregional Post Office No 5, was elected secretary of the session.

The agenda was approved:

1. Organizational matters.
2. The condition of transport service and the tasks in meeting the requirements of the national economy and the people of the city for freight and passenger transportation.
3. The plan of measures to carry out the mandate of voters who took part in the election of USSR People's Deputies in 1989.
4. Basic assumptions in introducing cost accounting relationships and developing self-government for the city of Moscow.

The question of building the Severnaya TETs was entered in the session's agenda in addition.

Deputy Ye. D. Kazantsev, chief of the Glavmosdortrans [Motor Transport Main Administration of the Moscow Soviet], delivered a report "On the condition of transport service and the tasks in meeting the requirements of the national economy and the people of the city for freight and passenger transportation." A co-report was delivered by Deputy A. L. Lisitsyn, chairman of the Permanent Commission on Transport and Communications of the Moscow Soviet.

Deputy Yu. A. Vinogradov, secretary of the Moscow Soviet Ispolkom, delivered a report "On the plan of measures to carry out the mandate of the voters who took part in the election of USSR People's Deputies in 1989."

Deputy D. G. Chernik, deputy chairman of the Moscow Soviet Ispolkom, delivered a report "On basic assumptions in introducing cost accounting relationships and developing self-government for the city of Moscow."

About 50 persons took part in discussing the questions on the session's agenda. The session's participants spoke from the rostrum and microphones were installed in the hall as well.

The session considered organizational matters.

Deputy V. D. Poplavskiy was elected chief of the Main Administration for the Supply of Materials and Equipment of the Moscow Gorispolkom.

Deputy D. G. Chernik was elected deputy chairman of the Moscow Soviet Ispolkom. He was released from the position of chief of the Finance Main Administration of the Moscow Gorispolkom.

A number of members of the Moscow Municipal Court were relieved of their duties in connection with their transfer to other work.

The Soviet elected a number of comrades as people's judges in the Rayon People's Courts of the city of Moscow to replace those who had left.

L. N. Zaykov, member of the Politburo, CPSU Central Committee secretary, and first secretary of the Moscow City Committee of the CPSU; senior officials of the CPSU Central Committee, the presidiums of the USSR and RSFSR Supreme Soviets, the USSR and RSFSR Councils of Ministers, and a number of ministries and departments; USSR people's deputies and deputies of the RSFSR Supreme Soviet; chairmen of the permanent commissions of rayon soviets; and representatives of the Moscow public took part in the work of the session.

Report by Deputy Ye. D. Kazantsev

Changes are under way in the capital's transportation complex, which is the largest in the world in the scope and volume of work being performed, as in other sectors of the national economy. Ye. D. Kazantsev said. Consider the figures: over 20 million passengers and 800,000 tons of freight are carried and more than 700,000 means of transportation are in motion every day. More than 600,000 persons are engaged in transportation and freight handling operations.

The speaker dwelled further on certain results achieved in transport work and cited the sums of capital investments spent to develop it, the number of passengers carried, the number of kilometers put into operation on the metro lines, and so forth. He also mentioned the fact that the new economic mechanism—cost accounting and self-financing and the collective and lease contract—is in effect today at most of the transport enterprises. The labor collectives of the MGPO [Moscow City Production Association] "Avtodor," the 21st Taxi Fleet, and 14 associations and enterprises in the Mosavto:rans [Moscow Motor Transport Administration] have made the transition to leasing relationships.

However, the steps being taken have not yet brought about fundamental improvement in transport work. The processes of extending the economic independence of the basic component—transport enterprises, and of applying economic methods and democratization in management are taking place more slowly than we would like, they are accompanied by labor disputes, and they are running into lack of competence and the habit of certain managers of operating in the old way.

We need first of all to define the paths for developing and increasing the efficient use of passenger transport. The development of available territories on the city's periphery in recent years has led to a situation in which 75 percent of the population now lives in "bedroom" microrayons within a radius of 15 to 20 kilometers from the center, but only 3 percent live within the Sadovoye Koltso [circumferential highway], whereas this is precisely where most of the enterprises, institutions, and cultural facilities are located. As a result, an obvious disproportion has taken shape between the distribution of manpower resources and the capabilities of transporting them. The overall time input to move one worker in the city has reached 2.5 hours per day. At the same time, the speed of passenger service, taking into account transfers and approaches to stops, is no more than 12 kilometers per hour.

All this is the consequence of underestimating the overall buildup of the new territories, the extraordinary influx of manpower from outside the city, and the concessions made by ministries and departments in developing industrial production.

Some 60 percent of the passenger traffic is accommodated by above-ground types of municipal transport. But the level and quality of service continues to be low and cannot meet the needs of the capital's residents. The extent to which rolling stock is filled during rush hours is considerably in excess of the norm. The sanitary condition and external appearance of many vehicles are unsatisfactory, every day the routes are provided with about 300 units of rolling stock less than planned, and quite a number of them are taken off the line prematurely because of a technical malfunction. The discipline of individual drivers is poor.

This is known to every Muscovite, but the managers of "Mosgortrans," Comrades A. I. Nechayev and A. M. Ulyanov, and transport enterprises are not taking effective steps. Advanced transport technologies, new forms of services, and fast express services are being introduced slowly.

The rayon ispolkoms are not displaying appropriate initiative and urgency here, either. They are doing a poor job in utilizing departmental buses, 11,000 of which are in Moscow, for passenger transport.

The Glavmosdortrans, together with the Glavmosfinupravleniyem [Finance Main Administration] and rayon ispolkoms, have to prepare proposals in the very near future on the procedure for utilizing these buses for municipal passenger transport, as well as on restricting

development of the departmental bus fleet in the city. The USSR Gosplan and the USSR Gossnab, in our opinion, should have reconsidered the practice of planning the deliveries of new buses to ministries and departments and sent the new rolling stock only to public transport enterprises, which could have transferred them when necessary to departmental motor pools after taking them out of intensive operation. This procedure would have responded to the interests of improving transport service for the public and contributed to consolidation of driver personnel in the bus fleets.

At present about 220 buses in the "Mosgortrans" Association are being diverted every day for suburban routes. We should ask the RSFSR minister of motor transport, Comrade Sukhin, to have these trips made with the ministry's bus fleet, as well as to tell us just when the situation at the Shchelkovo Motor Terminal will ease; because it is overloaded with work, its operation is leading to justified criticism from both passengers and residents of the microrayon.

The low level of taxi service is also creating dissatisfaction among Muscovites; there is only one-third of the service needed in the city. The system for taking and carrying out orders for taxi service has been poorly developed and the radio equipment in use is outdated and far from ideal. The number of radio-equipped taxis is extremely inadequate, although there are dozens of scientific organizations and plants in the radio and electronics industry and engaged in instrument building in Moscow which could have helped to resolve these problems.

In order to rectify the situation, it is planned to increase the delivery of passenger taxis by 20 percent in 1990, to put a new taxi fleet into operation, and to continue with the help of Zelenograd scientists to introduce an automated system for managing radio taxis.

Generally speaking, we would consider it advisable to reconsider the procedure for utilizing passenger cars operated as taxis, reducing the period of time that they are used in this capacity by no less than one-half and transferring them after this for sale to the public.

The metro is the basis of the city's entire transportation system. Unless drastic steps are taken to develop it, fundamental improvement in transport service for the people of Moscow is impossible. Meanwhile, the lag behind the city's General Plan in building metro lines already adds up to 60 kilometers. Practically all the central transfer junctions and many exits at stations are overloaded, and escalators have been neglected. The USSR Gosplan and the Ministry of Railways obviously underestimate the need for accelerated development of this form of transport, which is vitally important for the capital.

A plan for development of the metro up to the year 2010 has been drafted by the Moscow Soviet Ispolkom with the participation of the Ministry of Railways and the Ministry of Transport Construction and the appropriate proposals have been submitted to the USSR Council of

Ministers. We would ask the USSR Gosplan to again consider our proposals and to find the opportunity to allocate 2.8 billion rubles of centralized capital investments for these purposes in the 13th Five-Year Plan in order to build and put into operation no less than 50 kilometers of new lines and to renovate sections of the Moscow Metro that are under the most stress.

The Moscow Railroad also needs more help from the Ministry of Railways, especially in increasing the capacity of the main suburban sections, in increasing the delivery of cars for electric trains, and in developing facilities for the repair and maintenance of electric rolling stock. Up to 1.8 million persons depart from Moscow stations every day. However, they are leaving with considerable inconvenience.

The lag in developing the metro and the railroad is making the work of above-ground passenger transport in the city very complicated. We have been forced to accommodate the huge passenger flows of 35,000 to 40,000 per hour in one direction for a distance of 12 to 15 kilometers with buses, which not only results in increasing financial losses for the city budget, but inflicts harm on the ecology as well.

Moscow is the world's largest air transport hub, accommodating up to 40 million persons per year. However, the level of passenger service at the airports does not meet current requirements, either. All the airports are served within the city by one air terminal, which is obviously inadequate.

The problem of providing for the ever-increasing volume of passenger transportation in city and suburban services, the speaker stated, should be resolved not only by developing and improving the traditional types of transport, but by developing new types as well. We must see to this right now.

Later Ye. D. Kazantsev dwelled on the problems of trucking, which are vitally important in the city's normal activity. The automotive combines of the Mosavtotrans, which provide the bulk of the transportation, are not operating satisfactorily. Disruptions in the delivery of bread, milk, and other foodstuffs to the city's stores have become more frequent; interruptions are affecting the transport of vegetables, petroleum products, rock products, and reinforced concrete items. Freight and containers are not being taken from the Moscow hub's railroad stations in a timely manner.

We must say frankly here that the managers of the "Mosavtotrans" Production Association (Comrade Kupreyev, the general manager, and Comrade Karyakin) have practically lost the levers of control over the enterprises within their jurisdiction and have weakened interaction with the clients they serve and associated transportation facilities. As a result, discipline has broken down and its responsibility to the city for uninterrupted transportation service has declined.

Hopes that transport service in the city would improve with the association's shift to the new conditions of

economic operation have not been justified. Individual automotive combine managers view cost accounting from narrow departmental positions and group interests, neglect city clients' requirements, and do not look for ways of increasing efficiency in rolling stock use and improving transportation quality. By enjoying a position that is practically monopolistic, they dictate their conditions to clients. When contracts are concluded, they seek to accept only the shipments that are profitable for them. The contracts often are formal in nature, they do not reflect the clients' real requirement for freight transport, and the disgraceful practice of corrections and adjustments of volumes under what is actually carried still persists. In the first 6 months of this year, the original transport volume agreed upon in contracts with clients was reduced by 4 million tons. For this reason, it is not surprising that the managers of Mosavtotrans and its combines cheerfully report their complete fulfillment and overfulfillment of contracts at the end of each reporting period and receive bonuses for this, but the entire city suffers because freight has not been transported.

We need to review the existing procedure for evaluating the implementation of contracts for transport without delay and to develop a system of indicators which enable us to objectively evaluate the true nature of transport service quality.

Rolling stock is being utilized very poorly both by transport workers and clients. The number of trucks put out on routes this year by the "Mosavtotrans" Association declined by 3.2 percent. Only 65 of every 100 vehicles that are sent out are in operation, and even then for no more than 9 hours per day, and half of this time they are standing idle at loading and unloading points. Advanced technologies and progressive forms of work organization are not widespread in freight transport. There is a lack of businesslike collaboration with the scientific organizations of transport ministries and plants in the automotive industry in speeding up scientific and technical progress. The NPO [scientific production association] existing in the Mosavtotrans is operating out of touch with the city's needs, its efforts are dispersed in narrow specialization, and it is not conducting long-range studies at the level of world standards. As a result, the equipment it develops is known for its high metal content and low efficiency in operation.

The existing system of planning and management of freight transport in the Moscow Rail Hub is suffering from major shortcomings as well. The general-purpose stations are overworked today and are not coping with the volume of incoming freight to be processed, which is increasing every year. At the same time, with the tacit consent of the Moscow Railroad and Mosavtotrans, thousands of railroad cars and motor vehicles continue coming here for unloading and delivery of freight to hundreds of enterprises which have their own railroad sidings, warehouses, and motor transport. There is no doubt that such a "parasitical" position by clients is convenient for them.

In accordance with their joint decision, the Moscow Soviet Ispolkom and the collegium of the Ministry of Railways have demanded that managers of transport organizations and enterprises in the city strengthen interaction among themselves and take additional steps to develop the freight facilities of stations and motor transport enterprises. Implementation of this decision should be strictly monitored by the rayon soviets of people's deputies.

In Moscow, the report stated, the fleet of motor transport operated by departments is huge, numbering over 40,000 vehicles and 1,500 motor pools. The productivity in them is half that in general-purpose transport and the production cost of transport is 1.8 times as much. Many departmental motor pools are unprofitable, and their existence is completely unjustified.

In Moscow today, more than 350 such motor pools can be eliminated painlessly, the fleet can be reduced by 7,000 vehicles, and about 7,000 drivers can be released for work in public transport. The Glavmosdortrans is studying proposals such as this. The addition of new vehicles to departmental motor pools must be restricted. Both serious economic levers and measures to hold back the development of departmental motor transport are required. Steps are required to limit the entry of departmental motor transport into the capital for freight, bound for other regions in the country, which is shipped from hundreds of small warehouses and bases belonging to ministries and departments and which have no relationship to the city economy at all. The time has come to begin abolishing them and to establish a network of large-scale transshipment bases around Moscow for transit and interurban freight.

It is necessary to more fully utilize the capabilities of river transport, the report stated further. It is completely realistic to switch more than 2 million tons of freight from the railroad and motor transport to river transport and to reconfigure the existing river ports as container terminals and increase the number of berths to unload inert materials, taking into account the optimum distances for delivering them to consumers.

The production base of the transport complex must be reinforced at the same time. Only two-thirds of the rolling stock used in the city's passenger transport has been provided with storage areas. About 1,500 buses, trolleybuses, and streetcars are being stored in areas adjacent to yards and depots.

Vehicle repair plants are not meeting motor pools' requirements for major repair of assemblies, and at the same time, up to 30 percent of their capacities are being utilized for out-of-town customers, using up manpower and physical resources for this.

The capital investments allocated for development of the production base are clearly inadequate.

In order to rectify the situation in earnest, it is necessary first of all to change the attitude of the Mosstroykomitet [Construction Committee] toward the construction of

transport facilities and to consider them among projects of primary importance for the city. To eliminate the practice of construction over an extended period exemplified by the electric loader and truck crane base in Lianozovo, which the "Mospromstroy" has been building since 1977 at a cost of 3.5 million rubles; it was commissioned only in the second quarter of this year. And an example that is absolutely scandalous—the vehicle repair plant in Medvedkovo, which has been under construction for 20 years and still has not been put into operation. In Sovetskiy Rayon, the vehicle and road machinery base has been under construction since 1977, and only 750,000 out of 2 million rubles have been assimilated. There are many such examples of projects under construction for lengthy periods, but no one bears any responsibility for this.

More and more frequently lately we encounter displays of "group selfishness" by the residents of microrayons protesting against the construction of metro lines, above-ground electric transport, main highways, vehicle terminals and other transportation projects. This is the reason that construction cannot begin on a trolleybus yard in Izmaylovo, a terminal in Brateyevo, a municipal vehicle terminal at the "Krasnogvardeyskaya" metro station, and a number of other projects.

Individual rayon soviet ispolkoms are not conducting painstaking explanatory work, and by restricting themselves to the interests of their own rayons, they do not take into account the city's requirements and do not always support the residents' well-reasoned requests.

The plan for overall development of transportation up to the year 2010 which was drafted by the Moscow City Ispolkom provides for elimination of disproportions in its development. In particular, in the next 6 years it provides for the construction and commissioning of eight bus and trolleybus yards, a streetcar depot, a taxi yard, 12 terminal stations, and 15 service stations and gas-filling stations, as well as the construction and renovation of 17 truck transport enterprises.

By the year 2000 the fleet of motor vehicles in the city is expected to be increased to 1 million units. There will be a change in the quality of its structure. There will be 2 to 2.5 times as many gas-powered vehicles.

But there are problems which the city is not in a position to resolve independently, without the help of ministries and departments. For example, The number of "Icarus" buses and the spare parts for them are being reduced every year; at the same time, they are rising in price and the financial losses of the city budget are increasing, but the Ministry of Automotive and Agricultural Machine Building is unable to get the domestic "LiAZ-5256" bus, or the "ZIU-10" trolleybus, or new models of a minibus and passenger taxi in shape in any way.

Under these conditions, it would be advisable to study the question of organizing assembly production of trolleybuses in the Moscow region, as well as establishing a joint venture in the country to produce the "Icarus"

buses based at one of the automotive or automotive repair plants or the defense industry plants that are being reconfigured.

A special place in the report was devoted to the harmful effects of transport on the environment and the tense ecological situation in the city. Environmental protection work is not being carried out satisfactorily in 80 percent of the city's motor pools and more than one-third of the vehicles are sent out with unadjusted engines. And how is this to be accomplished if there are only 968 gas analyzers and 17 smoke density indicators available for 2,000 motor pools? Even the GAI [State Motor Vehicle Inspectorate] has only 56 smoke density indicators and 246 gas analyzers, 100 of which are defective, for inspections.

Harmful emissions by vehicles can be reduced significantly by increasing traffic speed, optimizing traffic patterns, and equipping vehicles with neutralizers. A General Plan for organizing road traffic in the city of Moscow and establishing a specialized subunit of the GAI to monitor harmful emissions by motor transport has to be drafted in 1990-1991 for this purpose. The GAI management must take urgent steps to regulate the transit flow of motor transport without stopping in Moscow and step up supervision to restrict state and cooperative transport from entering the limits of the Sadovoye Koltso.

In the combined programs to protect the environment, shift vehicles to gas operation, and equip them with systems to neutralize the exhaust gases, measures have been stipulated to improve the design of transportation facilities and their technical condition and to reduce harmful emissions by roughly 1.5 million adjusted tons. Within the framework of these programs, we must begin renovation of the production base of automotive enterprises using gas fuel without delay, primarily the taxi fleets, where operation of gas-powered taxis is now prohibited.

Many problems are also emerging in connection with the expansion of individual and cooperative activity in transport. Some 130 cooperatives and more than 4,000 owners of personal passenger cars which have acquired a license to transport passengers are creating additional opportunities to increase public transport service. But this business has been poorly organized.

The need to coordinate development of this activity cannot be put off; in particular, the issuing of licenses must be put in order, the extent of taxation must be regulated, and an association of owners of passenger cars engaged in passenger transport must be formed.

Normal operation by motor transport depends to a large extent on the condition of the city's street and road system, two-thirds of which does not meet technical requirements. At present more than half of the city's main arteries, and 80 percent in the central section, are overloaded. There is not one main artery in the city for high-speed motor transport.

A program for developing the production base of road maintenance organizations has been approved by the Moscow Soviet Ispolkom. The deliveries of road cleaning equipment will be nearly doubled beginning in 1990, which will make it possible to increase the volume of repair work by 30 to 50 percent.

The most important social task is to provide for traffic safety. After all, in the past 5 years more than 3,000 persons were killed and 30,000 were injured in road and transport accidents. A regional program has been approved by the Moscow Soviet Ispolkom to provide for traffic safety in Moscow transport in the period up to 1995. Implementation of it should lead to a reduction of 20 to 30 million rubles in annual losses from road and transport accidents and save human lives. All enterprises and organizations in the city should take part in carrying out the program's measures.

In examining the problems of the city's transportation complex, social problems, which are being resolved slowly at many enterprises, are advanced to the forefront because of their critical nature. Because of poor working and living conditions and the failure to provide housing, personnel turnover has increased sharply over the past 2 years. The motor transport enterprises of the Glavmosdortrans are now short 6,000 drivers and 3,000 maintenance and auxiliary workers. The people are leaving for cooperatives and departmental motor pools, where the labor intensiveness is much lower, the rolling stock is better, and the earnings much higher. There is essentially nothing to hold them back. During the years of the 12th Five-Year Plan alone, more than 110,000 square meters of housing were not received from the city by transport workers. The situation is no better in the current five-year plan, either. About 5,000 families are standing in line for housing. Shifting the functions of housing allocation to the rayons has not improved the situation. Many rayon ispolkoms have discontinued allocating housing to transport workers altogether.

Taking into account the specific nature of their work, passenger transport drivers need housing close to their place of work. It is obvious that special expenditures are not required for the "Mosobshchepit" [Moscow Public Eating Facilities] Association to finally organize around-the-clock eating facilities in rayons for drivers and persons working on routes and for rayon ispolkoms to seek opportunities for the allocation of additional seats in children's preschool institutions and garden and orchard plots.

We should support the proposal by the Central Committee of the Motor Transport and Highway Workers Trade Union to lower the retirement age for passenger transport drivers.

The new system of economic operation demands a high degree of organization, discipline and responsibility from labor collectives and managers at all levels. It is precisely from these positions that we must consider the suitability for the positions held of those managers who are not providing for the steady operation of transport

enterprises today and who are not capable of organizing and leading labor collectives.

In order to successfully resolve the problems enumerated, we must develop a system of managing the city's transport complex which is appropriate for a modern economic mechanism. The reorganization of the management system which was carried out is aimed at extending the independence of the basic component—the transport enterprise, and at establishing conditions for application of the Law of the USSR on the State Enterprise (Association) and the shift to economic methods of management. The former main administrations, which were transformed into production associations, have acquired the opportunity to manage their enterprises and structural units in strict conformity with the Law.

With the city's shift to cost accounting, it is necessary that the Moscow City Ispolkom, in the person of the Glavmosdortrans, act as the client for public passenger transport service. In order to rule out "monopolism" by transport workers and establish equal opportunities to meet the needs for freight transport, all enterprises and organizations must establish a developed system of transport forwarding in the city, taking foreign experience into account.

The organizational elements of this system already exist in the Mosavtotrans. Based on the Mostransagentstvo [Transport Agency], a commodity transport forwarding station and a hub office for transport forwarding and warehousing operations, a specialized city production association can be established. Through day-to-day management of freight transport, it will be able to draw in departmental transport on a wide scale, load vehicles going in the same direction, make an active contribution to resolve problems of transport efficiency and the introduction of advanced technologies, and ensure coordination and interaction by all types of transportation and between consignors and consignees.

In order to resolve these problems, a review of the regulations of railroads and motor transport which have become an obstacle under the new conditions of economic operation is urgently needed as well. In particular, equal rights should be granted and the mutual economic responsibility of all participants in the transport process should be consolidated.

With the transition to the principles of self-government and self-financing, the Moscow Soviet should be granted more rights in regulating transport rates for freight and passengers in order to meet the city's interests.

The speaker stated in conclusion that provision for the city's normal vital activity and successful development of its economy and social area depend on the steady and smooth operation of transport facilities. For this reason, Muscovites attach considerable importance to the work of the Moscow Soviet's current session and have made hundreds of suggestions for further improvement of municipal transport. All of them, as well as the remarks and suggestions by deputies and participants in the

current session, will be reviewed during the drafting of plans for 1990 and the 13th Five-Year Plan, which should be embodied in specific actions by the capital's labor collectives.

Co-Report by Deputy A. L. Lisitsyn

It should be noted first of all that there are enough decisions on development of the city's transport complex that were approved previously. However, there is a huge gap between what was adopted and what has been implemented. For example, only half of the decision by a similar session of the Moscow Soviet in 1978 was implemented, at best, and with respect to certain provisions, only 25 percent was carried out. In the past 4 years alone, two decrees of the USSR Council of Ministers and 10 decisions by the Moscow Soviet Ispolkom were adopted. But as the report noted, not one of them was carried out.

Over the 2 years of its work, the commission has repeatedly noted the lack of discipline by managers at various levels in implementing these documents, although we were unable to bring about changes, unfortunately. It is clear that for Moscow, with its metro burdened with a workload that is unprecedented in the world, and for the areas of suburban traffic and intensive passenger and above-ground transport, the attitude toward the problem examined should be fundamentally changed.

Let us dwell on certain major problems which, in the commission's opinion, must be resolved if we are to expect noticeable improvement in transport service for the public and national economy of the city. They include development of the material and technical base and the delivery of rolling stock, different types of motor vehicles, trolleybuses, streetcars, metro cars, and suburban railroad passenger cars of suitable quality in the necessary quantity. Some 800 trolleybuses will be subject to writeoff because of their technical condition and obsolescence, but delivery has been set for 300 units. And the new models of trolleybuses are less reliable than the older ones. Work has not been completed on a new bus by the Ministry of Automotive and Agricultural Machine Building, and a large-capacity bus is not being produced.

The managers of the Ministry of Automotive and Agricultural Machine Building who are present here, obviously, will report to the session on the kind of contribution they plan to make to resolve the city's transportation problem. A meeting of the commission made a detailed examination of the problems associated with development of the metro's technical facilities.

In the process of preparation, we familiarized ourselves in detail with the state of affairs in the metro subunits firsthand. I want to draw your attention, comrade deputies, to the fact that the Moscow Metro is in the worst condition today. The rolling stock, escalators, structures, and facilities on a number of routes are operating at the limit of their technical capabilities and have become obsolete. The cars in the new series being delivered by

the Mintyazhmash [Ministry of Heavy, Power, and Transport Machine Building] have extremely low reliability and constitute a greater fire hazard. The government decrees on these problems are not being implemented satisfactorily. And by the Ministry of Heavy, Power, and Transport Machine Building and the Minelektrotekhpribor first of all. Why shouldn't deputies be indignant that it has taken 2 years to agree on a draft of the USSR Council of Ministers instruction on modernization of the metro cars!

The session clearly has the right to ask managers of the ministries, primarily the Mintyazhmash and the Minelektrotekhprom [Ministry of the Electrical Equipment Industry], what they actually intend to do, and in what period of time, to resolve the most critical problems of the Moscow Metro.

We cannot examine the problems of improving the operation of municipal transport in earnest without reinforcing the production base for repairing and servicing equipment. The commission supports the proposals in the draft decision on organizing a specialized subunit in the Mosstroykomitet to build facilities for the transportation complex.

At the same time, the transport workers cannot remain indifferent to an increase in their construction organizations' capacities. And the managers of the "Mosgortrans" Association should not only establish the fact that they are not in a position to carry out the volume of work required because their own construction facilities are not up to strength, but they cannot take steps to resolve these problems, either.

The Moscow Soviet Ispolkom is not consistent in its decisions, either. In May 1986, construction of a production building for repairing the "Icarus-280" at Bus Yard No 6 was planned for 1988-1989. However, construction was not even started. In its decision of 6 October 1988, the Moscow Soviet Ispolkom changed what had been planned, carrying over the period for construction of the building to 1993-1995. As a result, a repair facility designed for 450 medium-capacity buses of the "LiAZ-158" type is being used today for more than 600 vehicles, including 200 "Icarus-280" buses.

In the commission's opinion (and the deputies include many drivers), the roads are the most neglected problem in the city. We do not recall such a situation in Moscow. The losses because of the breakdowns and premature obsolescence of rolling stock and the reduction of traffic speed, with all the ensuing consequences, keep increasing the expenditures to put the roads in order.

It seems to us that we must take inventory or classify all the roads in the city, select our priorities and begin acting without delay.

Another question of vital importance is resolving the transport workers' social problems. There is an entire spectrum of critical problems here. The report already

cited the figures and the number of persons on a waiting list for improved housing conditions in the city's transport enterprises.

I would like to emphasize that 2,700 persons are on the waiting list for improved housing in the "Mosgortrans" Association. Out of a supposed 14,000 square meters in 1989, only 400 have been received at present. Problems with housing are also being experienced by workers at the metro, the Mosavtotrans, and the Moscow Railroad.

The situation has sharply deteriorated with the transfer of housing allocation functions to the rayon soviet ispolkoms this year. In our commission's opinion, this principle is unacceptable for the city's transport workers.

Deputies on the commission are focusing their attention on the question of relaxation and eating facilities for drivers and dispatchers at terminal stations, and these are the worst sore points for many of us.

A clear-cut picture has emerged: where the managers of transport enterprises and public dining facilities approach their work responsibly, the result is apparent. For this reason, only the irresponsibility of the officials concerned can explain the unsatisfactory situation at a number of terminals which makes the drivers highly indignant.

Solution of the social problems of transport enterprise workers is determined to a significant degree by the economic indicators of the work under the conditions of the new economic mechanism.

A few words on freight transport. The report details the problems involved, which have become especially acutely. Solution of these problems requires that basic steps be taken to develop clients' warehouse facilities and loading and unloading facilities, primarily for working with large-capacity containers.

All those who are involved with freight coming from the railroad should work not until 1500 hours, but as the railroad workers do, around the clock and on Saturdays and Sundays. Only then will they get things moving.

Then the deputies began discussion of the report by Ye. D. Kazantsev and the co-report by A. L. Lisitsyn.

S. Ya. Beregovoy, a driver at Motor Depot No 30 of the "Mosovoshchtrans" Production Association, is given the floor.

In my 30 years of work, he said, I have had occasion to experience for myself all the lack of coordination in the transport production line. I am firmly convinced that the situation can be improved by just relying on the people, the drivers in particular. We must be able to train them for the work. But the fact that many new drivers that come to us do not know where to pour the water and the oil and where and on which side to drive attests to the quality of the capital driver's training.

For this reason, I suggest that the managers of vehicle training centers that are present here devote particular attention to personnel training.

I also want to say that we are working without clear-cut plans for tomorrow. Rush jobs and shock work constantly. Our enterprise is not like a transport enterprise, but a fire brigade. As a result, the city's residents are suffering: they are receiving less vegetables than they should.

What must be done to improve the prestige of the driver's work? First of all, we must establish normal conditions for the driver's work and relaxation. I see that only the members of leasing brigades, of which we have four, are displaying real interest at the enterprise. The productivity of their vehicles has increased from 3.5 tons to 6 tons, and the productivity of their container carriers has increased to 10 tons. It is time to develop the leasing form more extensively and thoroughly. It will help to bridge the gap. Is it possible: there are 530 vehicles officially listed in our fleet, but 370 go out on the routes. It turns out that 150 vehicles are guarding the fence at the motor depot.

I could cite many other examples of scandalous mismanagement and bungling, though that is not the purpose of my speech. I urge that we set to work energetically and sensibly by rolling up our sleeves.

V. N. Nutrikhin, deputy chief physician of City Hospital No 17, spoke about the effect of air pollution on people's health. As a deputy from Solntsevskiy Rayon, I have devoted attention to its development and transportation service. After all, in just the past 2 years, more than 80,000 Muscovites have moved here to live. The 1987 decision by the Moscow Soviet on development of Solntsevskiy Rayon is being carried out successfully. And the program to build it up will be completed in 1989. But the social infrastructure is lagging behind by 2 to 2.5 years. In 9 months, 86 percent of the plan to commission housing was fulfilled, but only one of the seven nursery schools has been built and one of the three schools has been built. Construction has not begun on any of the three bus terminals that were planned. Transportation is one of the rayon's most critical problems.

In order to resolve it, **Ye. D. Kazantsev**, the deputy chairman of the Moscow Soviet, held a detailed conference in 1988 with representatives of all the officials concerned. The transport situation was improved, though the problem has not been resolved completely. The assurance by officials that it would be resolved in the shortest possible time remains unfulfilled.

For example, a decision was adopted to extend the length of the platform to dispatch electric trains with 14 to 16 cars and to change the schedule for the Peredelkino platform, as well as to design a third passenger path up to the Lesnyy Gorodok station. As of today, nothing has been done.

The important question of building a pedestrian tunnel at the Solnechnaya station continues to be unanswered

as well. The railroad bridge is practically in disrepair. For 2 years now the Mosgortrans has been studying the possibility of starting jitney taxis from Solntsevo, and they have not learned anything to date.

The same may be said about development of the ecologically clean trolleybus service. The area for a trolleybus yard was set aside over 3 years ago. I would like to hope that the rayon will receive a trolleybus for Peredelkino in 1991, all the same.

In order to improve transportation service for the residents of new microrayons, the rayon soviet ispolkom raised the question of building a road from Novo-Peredelkinskaya Street to the Kiev Highway. But nothing has been done yet. How much can they procrastinate?

V. K. Resin, the first deputy chairman of the Mosstroykomitet, stated that discussion of the transportation service is very timely. The end result of the builders' work depends to a considerable degree on the smooth operation of centralized motor transport.

In recent years the "Mosavtotrans" enterprises have been reducing the volume of centralized shipments of the basic freight—the freight that determines the course of construction. This year the situation has deteriorated even further. With respect to transport service for construction, a similar situation is taking shape in drafting the plan for freight shipment next year. Thus the centralized motor transport of the "Mosavtotrans" has begun applying the brakes to the city's construction production line. In this connection, I would like to raise the question of increasing carrying capacity by 10 to 15 percent as soon as possible. This can be done by organizing transport work in two and three shifts.

The Mosstroykomitet has sent suggestions to the Moscow Soviet on revision of a number of the clauses in the motor transport regulations of the RSFSR, with a view toward reinforcing the mutual responsibility of the sides involved in the transport process. The "Mosstroytrans" Production Association, with a fleet of 1,470 trucks, has been established in the Mosstroykomitet. This association has the task of increasing efficiency in the use of motor transport.

In my view, one of the basic and principal ways to increase efficiency in the use of motor transport is to increase the ratio of vehicles sent out on the routes. I must say frankly that it is still quite low in the Mosstroykomitet's association.

Ye. G. Dubchenko, the chief of the Moscow Metro, takes the rostrum.

The network of metro lines that exists today, he said, lags behind the city's requirements. In this connection, we are continuously engaged in work to increase the capacity of lines and new automated traffic safety systems are being introduced. New cars equipped with microprocessor control systems for monitoring and on-board diagnostic units are being developed jointly with supplier plants and scientific research institutes. All the

same, it must be mentioned that implementation of the measures planned jointly with the Ministry of Heavy, Power, and Transport Machine Building and the Ministry of the Electrical Equipment Industry to modernize the rolling stock in use and develop a new car is unacceptably slow. We are very concerned about this.

There are more than 3,500 units of rolling stock in the metro now, and the problem of repairing it and providing spare parts arises all the time. We are experiencing considerable difficulty in fulfilling the planned targets for repairing cars in our own plant; its overall condition is not up to the current standard. The technical condition of escalators continues to be a problem that is no less acute.

Some 16,000 kilometers of cable lines, 3,000 of which need to be replaced, are operated in the metro. We are earnestly asking the labor collective of the Moscow Cable Plant to meet the targets for delivery of fire-resistant cables which were stipulated by order of the USSR Council of Ministers.

In the 1989-1990 period, we are to accept 33.3 kilometers of new lines with 17 stations and 3 electric train depots from the builders for operation.

Additional exits will be built at the "VDNKh," "Belorusskaya," and "Baumanskaya" stations. In the 13th Five-Year Plan, it is planned to build an additional exit at the "Komsomolskaya," "Paveletskaya," and "Park kul'tury" stations on the circumferential line and the "Kiyevskaya," "Mayakovskaya," "Semenovskaya," "Elektrozavodskaya" and "Arbatskaya" stations.

The availability of a great many documents granting the right to a trip on the metro free of charge is creating certain difficulties in the work. In this connection, we ask the RSFSR Ministry of Motor Transport to speed up approval of a common form for a nominal pass [talon-vkladyshe].

Taking into account Moscow's forthcoming transition to regional cost accounting, we ask the Gorplan [City Planning Commission] and the Finance Main Administration to provide capital investments to put 50.7 kilometers of lines into operation.

In her speech, L. V. Burova, the manager of the Krasnogvardeyskiy Meat Processing Plant and chairman of the Permanent Commission on Public Eating Facilities, noted that the speaker delivering the report had criticized various ministries and departments but the deputies have not heard specifically what is being planned. It is not clear, for example, how the Mosavtotrans intends to provide meat industry enterprises with specialized refrigerated transport during the summer season. One need not be a big specialist, L. V. Burova continued, to imagine the quality of meat convenience foods and sausage products inside a vehicle where the temperature is 30 degrees above [Celsius]. The Commercial Transport Administration can be understood in some places: it is impossible to resolve all the problems immediately. But it is necessary to take decisive steps, all the same, in

order to adhere to the schedule for providing motor vehicles by the hour, to maintain a shift routine, and to prevent vehicles with technical defects from being sent out on the route.

The managers of the Mosmyasoprom [Moscow Meat Processing Industry] have raised these questions more than once before Comrades Kazantsev and Kupreyev. Joint meetings have been held with the participation of the party's city committee, minutes were recorded, periods of time were set, the persons responsible were assigned, but there has been practically no progress. The situation in the Mosobshchepit is no better.

We must consider transport service not only as a sector today, but as the organizer of a rhythmic pace in the city's life. Failure to provide the necessary number of buses in the morning hours, disruption of the schedule for them to be put into service, breakdowns on the routes, and malfunctions in the metro are leading to the point that people are late for work. Bitterness is being shown and labor productivity is declining at enterprises. Can we blame all this on the shortage of rolling stock? Of course not. With all the many problems which exist in the sector, there is no place for efficiency in the management of the main administration. Specifically, in resolving internal matters. This means expansion of the repair facilities, providing for spare parts, and updating the rolling stock.

Many problems in commercial transport can be resolved if the Mosavtotrans management works together with associated sectors to develop a mutually advantageous economic system to pay for transport and provide wages for drivers in accordance with the principle of industry-transport-commerce.

V. D. Astashkin, a driver in the 13th Taxi Fleet of the Mosavtolegtrans [Moscow Passenger Car Transport], stressed the need to adopt measures quickly to "provide treatment" for the capital's taxi service. Moscow, with a population of 9 million, not counting visitors, has 21 taxi fleets at its disposal—a drop in the sea. That is why the taxis' motto is a plan at any cost. Some 87 percent of a considerable amount of money goes into the state budget and only 13 percent is used for the needs of the taxi fleets. The vehicles accumulate up to 450,000 [kilometers]; it is shameful and terrible carrying passengers in the taxis. This equipment is obtained basically by young persons, who immediately get caught in the system of "if you don't grease my palm you don't go," and on the routes they are forced to make up for the expenses at the cost of the passengers. What kind of education for the youth can we talk about then?

A plan that is set too high, a low ratio for empty runs, and outdated economic norms are forcing us to work to the detriment of passengers by selecting profitable routes and passengers and refusing unprofitable trips to the city's outskirts in the evening. Washing of the taxis is done outside the city. Drivers are leaving for Moscow Oblast in order to work normally under normal conditions.

The adoption of premature decisions and orders, such as on private carriers, for example, is also having an effect. The entire area in front of the Kursk terminal is filled with private vehicles, and it is not clear which are the private taxis and which are simply the grabbers that organize criminal groups which have an obvious effect on passenger service by jitney taxis and others. We need to legalize the distinguishing marks on such vehicles, then the inspection organs will be able to distinguish those who are operating illegally from the private taxis.

In order to change the situation in taxi operations, drastic changes are needed, many standards which do not conform to either the time or the situation must be revised, and considerable independence must be given to enterprises. The first step is a lease, but it has to be updated as well. The person that has counted on a lease is far removed from the vocation of taxi driver and the situation that exists in the fleets. Taxis need to be completely equipped with radios, not by increasing the number of dispatchers, but by introducing electronics and automated equipment and automated control systems.

We also need to give some thought to how to bring the drivers and passengers closer together, to compel them to work for their passengers. Why not take a ruble for a trip instead of 20 kopecks, and not leave it for the driver? He will be made directly dependent on the passenger, who will not have to overpay. On the other hand, the driver will know that he earns a ruble for a trip, regardless of how long it is, and that his earnings depend only on the number of passengers carried.

The problem is complicated, of course, and requires a certain amount of study; this is not only my opinion, but the opinion of persons with experience. Because a wage under a lease from fixed receipts is also a violation of labor legislation; persons work for 15 to 17 hours, which leads to fatigue and accidents. But I do not think we will solve the transport problem soon. Because there is little interest by those officials who resolve it. After all, they don't have to be jostled in the metro and wait in the rain for a bus or catch a taxi. This is no problem for them.

Conclusion of the report on the Moscow Soviet session will appear in the next issue.

[15 Oct 89, pp 1-2]

[Text] As already reported, the 10th Session, 20th Convocation, of the Moscow City Soviet of People's Deputies was held on 13 October. Today we conclude the publication of the session's materials.

T. T. Ovchinnikov, manager of the Krasnopresnenskiy Streetcar Depot, told the gathering that in his opinion, the system in effect for financing city transport, based on financing in accordance with the residual principle, does not establish the conditions for operation of the depot and the fleet of cars under full cost accounting and self-financing.

Enterprises have pittance now for economic incentive and social development funds, and they have no funds to

develop science, production, or technology. There is practically no possibility of expanded reproduction and solution of the social problems facing the depots and car fleets.

But there is a way out of this difficult situation. About 100 enterprises in the city are now paying for the work trips of their employees under direct contracts, and this payment principle will make it possible to discontinue city subsidies, which are constantly increasing. Next year the unprofitableness of passenger transport will increase by another 170 million rubles over the amount stipulated by the draft budget.

It is proposed that the point of the session's decision be changed from evasive to specific wording, inasmuch as there is no question that consolidation of the financial situation will make it possible to quickly resolve the personnel problem as well. We now lack about 5,000 drivers, and only decisive steps will make it possible to increase drivers' vacation time, the additional payment for evening and night work and the long-service bonus. Reduction of the drivers' retirement age—men to age 55 and women to age 50—would be a most important social measure. Especially as statistics show that only 1 percent of bus drivers work until their pension.

I will add that we have more than 12,000 persons, including 3,500 children, living in dormitory facilities. It is proposed that the decision of the Moscow Soviet Ispolkom on transferring living space to transport workers through the ispolkoms be repealed, and this decision should be carried over from the measures resolved in the session, it seems.

And finally, the material and technical base: while seven plants worked on one streetcar in the 1930's, after 50 years these same seven plants are working on a streetcar, a bus, and a trolleybus.

But nothing was stated in the draft decision about renovation and new construction at the plants or about the manufacture of components and spare parts at the plants.

I represent the only collective of taxi drivers who lease their vehicles in Moscow, V. G. Tsvetkov, manager of the 21st Taxi Fleet, said, and I want to report on the results of our work.

When the fleet of vehicles was increased by 3.5 percent, the collective increased the volume of transport by 22.8 percent and it had 9.7 percent more earnings than last year. At the same time, the state order was overfulfilled by 3.5 percent. The collective was able to achieve this only because of the introduction of new relationships, which are not coordinated with the existing system of legislation, of course. I should say that these successes could have been achieved not only by our collective, but the collective of the entire association if artificial complications had not been created in introducing a lease contract.

Of course, it was difficult for the taxi fleet to develop work methods independently and introduce them at the

same time. But today 92 percent in the fleet are working under lease contracts, and at the taxi fleet, which has had a chronic shortage of personnel, there is now a line of those who want to work in the collective.

At the same time, a rigid system of command and administrative methods, concern for trifles, and interference in the day-to-day activity of the enterprise are being maintained in the Mosavtolegtrans [Passenger Car Transport Administration of the Moscow City Soviet], and these methods are unlikely to give any kind of hope not only to deputies, but Moscow city residents, that transport will be improved. I can tell you this professionally.

In addition, there are practically no specific decisions in the current session's draft resolution which are aimed at improving the taxi service. Perhaps this sector really does not give the city anything except financial prosperity; then we should probably also forget about the disgraceful things that are going on in the taxi fleets today and for which we, the employees of enterprises, are to blame.

I believe that today's session has the right to consider the three proposals I want to submit. The first one is an increase in the number of taxis. There should be 1.5 times as many of them. And it is not necessary to build up large taxi fleets such as ours over 6 to 8 years at a cost of 4.5 to 5 million rubles in capital investments. When operated under a lease contract, it is enough to have 100 to 150 vehicles in residential microrayons equipped with repair shops and washing and cleaning facilities. We could provide the procedures and technical requirements if the planners undertake these tasks.

Secondly. We must introduce compulsory identification markings on taxis for individual owners and cooperative members and establish the economic prerequisites for them to join together with the state taxis in a "Taxi Drivers Union." At one time we submitted proposals such as these to the Mosavtolegtrans, but they were not given any support.

Thirdly. Consider the advisability of the existence of a "Mosavtolegtrans" association in its organizational form. If we record just these three proposals, there will be hope that we will make things easier for the city's residents to a certain extent.

Yu. S. Sukhin, the RSFSR minister of motor transport, began his speech by citing the figures on expenditures for transport service in the national economy. They add up to 100 to 110 billion rubles. In 4 years, the RSFSR Ministry of Motor Transport provided for fulfillment of all the five-year plan's scheduled figures, a 27-percent increase in labor productivity, and a 19-percent increase in wages. Some 1.5 million persons working in the sector were shifted to new salaries and new wage rates, and 100 percent of the contract commitments were carried out.

But the speaker stressed that he did not want to draw the deputies' attention to this. Why are the owners of the motor vehicles which are leading to tremendous expenses in the national economy in the consumption of

resources and the utilization of motor transport not in this hall and on this rostrum?

Transport ministries all over the world determine the tariff policy for transport, the tax policy for all transport, and the licensing. A license is not being issued for all types of transport, and I think that if we cover departmental transport with taxes, the money to maintain the city's transport will be found.

Each year traffic speed declines by 10 percent. Every year we should add 600 buses to the routes. At the same time, industrial vehicles—the MAZ and KrAZ vehicles—are driven around the city. There are many empty vehicles on routes because we have no economic tax levers.

With regard to the Shchelkovo bus station I will say that there is no order. We blame the Moscow Soviet, and the Moscow Soviet blames the ministries, and the passenger suffers as a result. Because of the increased number of suburban areas, the passenger flow into Moscow Oblast and beyond its borders has increased sharply. We cannot manage with one station, and we should not build large stations next to the metro, but the kind that enable a person to change seats and travel farther. This must be resolved in the 13th Five-Year Plan, and we agree to finance it.

A. I. Nechayev, general manager of the Mosgortrans [Moscow Passenger Transport Administration], acknowledged that transportation has been turned into one of the city's most critical problems, and the criticism of him is absolutely justified. After all, in spite of the huge capital investments, he has not been managed to bring about fundamental improvement in transportation service, particularly to completely meet the public's needs for passenger transportation. However, rolling stock can be put out on city routes and its capacity increased by no less than 15 percent at the same time in the near future. A number of problems must be solved for this.

The first and most important factor: the economic mechanism in city passenger transport must be changed quickly. The city is shifting to territorial cost accounting. In this connection, enterprises and organizations are shifting to self-financing and cost recovery. Enterprises are paying now for fixed capital, for electricity, gas, water, manpower and land. Why aren't they paying for official trips and the delivery of their people to their places of work?

They may say that enterprises are also paying into the budget, and transport workers receive money from the budget. That is true. But perhaps it is necessary to reduce the payments to the budget and direct this sum to payment for work trips. A profitability should be provided for in the rates which not only makes it possible to barely cover expenditures, but provides the opportunity to carry out expanded reproduction as well.

Leningrad, Minsk, Brest, Grodno, Vitebsk, and a number of other cities in the country are preparing to

shift to such a relationship between transport workers and enterprises beginning in 1990. We ask the deputies to support us in this matter.

I cannot help but mention the personnel problem. With understaffing such as ours, the drivers' workload is increasing sharply. Hence there is a lot of overtime work, dissatisfaction, and labor turnover.

The basic reason is the extremely intensive work. In order to get to work on time, a driver gets up at 0300 and also finishes his work at 0300. Very seldom does he have days off on Saturday and Sunday and he has no holidays.

In addition, the driver is continuously in motion according to a schedule, and the time between trips ranges from 3 to 7 minutes. In recent years, the drivers' work has been aggravated by the worsening ecological conditions in the city. On hot days in the summer, some of them simply lose consciousness at the wheel.

Such work should be compensated by additional benefits, of course. The draft of a law on pensions, which provides for preferential pensions for length of service by drivers in city passenger transport, has now been prepared in the USSR Supreme Soviet.

Housing is a critical problem. In 9 months, 15 ispolkoms of rayon soviets have not allocated one meter, although the ispolkom of the Moscow Soviet obliged the rayon soviet ispolkoms to allocate 1,300 square meters for city passenger transport workers. And some ispolkoms made no provisions at all in their housing plans for passenger transport workers.

The material and technical base of city passenger transport is also weak; 65 percent of the production areas have been provided for today. It is time for the construction committee to establish a specialized enterprise to build passenger transport projects.

Ye. K. Kupreyev, general manager of the "Mosavtotrans" Association, said he considers the association's work to be unsatisfactory. In order to improve it, a decision has been prepared by the Moscow Soviet, and this document will be fundamental in future work. But it is impossible to be confident that the situation will be changed soon for several reasons. We will direct attention to the Law on the State Enterprise. We are working today on halfway measures: we are trying to maintain a kind of administrative style in applying the new economic methods.

Is there a solution? There is. It is leasing. We have 10 enterprises and three associations today that have switched to leasing. But its foundation must be mutual and bilateral, and the mechanism for relations with the main administration must be adjusted. An order is needed for what the city must transport.

A material base, rolling stock, and housing are provided for this under a contract. There will also be a mutual order, a state order, which we do not have today. That is the main point. It is what work has not been completed on today.

And again, the personnel. Over the year 3,500 drivers have left, basically for the cooperatives. Because we are paying 64 percent of the profit to the budget. The cooperatives pay 3 percent of their income or 9 percent of the profit. They have the opportunity to lower the state rates as well and pay double or triple wages. The working class is leaving for this reason. It must be retained, otherwise there will be no one to apply our good organizational measures to tomorrow.

Transport is carrying a heavy workload, especially the transport that operates around the clock: it is carrying bread, and milk. We must be sure to devote close attention to these trips—a vehicle cannot operate with bread or milk for 12 years.

A second problem. They have shifted the distribution of housing into the rayons. We have 85,000 workers, dear comrades. I have 5,500 persons on a waiting list. We received 900 square meters this year. Well, how can we retain the working class, how can we keep it and how can we provide for all the city's needs?

I will mention the change in structured management. There used to be a main administration and an association was begun, although a kind of office was left on the spot. Though the bulk of the specialists are not. Rights did not begin, but responsibilities remained.

Now it is planned to form transport-dispatch enterprises which will assume the functions of working with a client, so the automotive industry will be removed from these functions. But can we come to a stop, all the same? We must begin to work and be responsible for the work, and not devise new structures.

Yu. S. Kirichenko, deputy minister of automotive and agricultural machine building, noted that the state of affairs with respect to transport in Moscow is very complicated. It is more complex than in a number of other cities. The ministry will fulfill its commitments for the delivery of passenger and freight transport and their spare parts in accordance with the funds allocated for the Moscow City Ispolkom.

In accordance with the Gosnab multiple purchase order we are obligated to deliver 300 trolleybuses; we have delivered 171 already, but by the end of the year we will complete the deliveries. But this concerns not simply trolleybuses, but a new type of trolleybuses. This year we will also deliver 150 articulated trolleybuses of especially large capacity and 490 "LiAZ-677" buses.

That is an old model; a new one, the "LiAZ-5256," has been developed which has a number of advantages in quality indicators and comfort for both the driver and the passengers. Very important renovation of the plant is under way today, and beginning in 1990 it will be completely shifted to the production of new buses.

As far as the accelerated output of light trucks to haul freight in the city are concerned, it is planned to organize the production of 1.5-ton trucks at the Bryansk Truck Tractor Plant.

I will say a few words about neutralizers [presumably: catalytic converters]. Our industry has turned out practically none to date for purifying exhaust gases and reducing toxicity. Production of this equipment with the participation of U. S. and Swedish firms will be organized at the Mosselmash Plant, which is being respecialized.

Yu. A. Koshelev, chief of the Mosmetrostroy [Moscow Metro Construction Administration], stated that construction of metro lines has lagged behind the city's needs for a number of reasons, and metro construction workers are very concerned. The problem, he continued, is that we do not have prospects for work in the 13th Five-Year Plan and we are entering it with practically no work in progress. A decree was to have been issued in 1987 by the Council of Ministers on the construction of metro lines in the 13th Five-Year Plan. This decree has not been issued to date.

The numerous letters to the Council of Ministers and the drafts of the decree that were prepared have been in the Council of Ministers offices for over a year and are not being examined. Though the other day a step was taken which may be considered a very small one—the authorization of preparatory operations on lines, which is far from all the lines in the list for the 13th Five-Year Plan.

It seems that if decisions are not made in the forthcoming days and weeks on metro construction in the 13th—as well as the 14th—Five-Year Plans, the figures published in an important document such as "Progress-95," on the construction of 50 kilometers of lines will be brought to naught. It seems to us that the responsible officials in the Council of Ministers, the Gosplan, the Gosstroy, the Ministry of Railways, and the Moscow Soviet are assuming too much responsibility before the residents of Moscow.

I propose on behalf of our session that the Council of Ministers be asked to adopt a decision in the shortest possible time on metro construction in Moscow in the 13th Five-Year Plan.

Consideration and approval of planning documents are proceeding slowly. The technical and economic substantiation for the sections from Lyublino to Marino, Marino to Krasnogvardeyskaya, and Chkalovskaya to Komuna Square, which were worked out from July to November 1988, have not been approved to date.

N. P. Shepelev, deputy chairman of the Glavmosarkhitektura [Main Administration for Architecture], noted: The current situation with respect to transport in the city, generally speaking, is not unexpected, inasmuch as the General Plan was developed for a population of a specific size, and the transport system was planned for this number of people. The city has grown more rapidly than transport has. But this is not the matter of concern now. Today we must speak about the condition of the network of streets and roads; this is the key question. Every day 42,000 tons of oxygen are consumed to burn the 14,000 tons of fuel which Moscow's transport uses daily. And if speed is increased by 1 kilometer and the

waiting time at intersections and in traffic jams on the streets is reduced even by 10 minutes, it is even hard to predict what the gain would be. But unfortunately, we have an impasse situation today—everyone is blocking a solution on the road system. Today the route from Moscow to Riga is being closed, Lipetsk Street has no exit to the MKAD [Moscow Circumferential Highway], and the situation in the city is getting worse because of this.

Believe me, today we have a situation in which these local decisions are really paralyzing the city as a whole, and we can come only to traffic paralysis. We already have a pre-infarction situation on the Sadovoye Koltso and there will soon be a drivers' strike there.

A. V. Komarov, a driver in the 19th Taxi Fleet, dwelled on urgent questions of developing the social area at enterprises of the Moslegavtotrans.

In 1975, construction of a pioneers' camp was begun for the Third, 18th and 19th Taxi Fleets. The construction has been continuing for 14 years. It was planned for commissioning in the third quarter of this year. Then they carried it over to the fourth quarter. But when they visited the project, they saw how things were going and realized that they would not turn it over before the end of the year.

But after all, this pioneers' camp is very much needed, especially as they planned to make it usable the year round. In summer it is for the children, but in winter it is a holiday hotel or a relaxation area for adults.

River transport workers are concerned most of all that the volume of cargo taken to Moscow by river transport is practically not increasing at all and has been held up somewhere at the level of 22 million tons. This uneasiness about the state of affairs in river transport was expressed in a speech by **V. F. Berezin**, chief of the Moscow River Shipping Company.

Some 60 percent of the nonmetal materials are transported by river for the city's needs. And today we are operating on a limit together with the Mosavtotrans and the Mosstroykomitet. Why?

Today all the ports are practically clogged with sand, and more has been transported than last year. It's a dead end. And it did not arise today, incidentally.

The Moscow Soviet adopted a decision 8 years ago on the construction of sandpits and mooring points for unloading crushed rock in a number of Moscow rayons. This made it possible, first of all, to reduce the distance traveled by motor transport, to reduce the need for it, and to increase the quantity of these needed materials transported by water.

In 1986 the Moscow Soviet again adopted a decision and once again the same program was approved for construction of moorages and sandpits with a capacity of 8 million cubes [presumably: cubic meters]. And again nothing is being done.

The second problem is a very important one. Everyone is acutely aware of the shortage of building materials today. There is a decree by the RSFSR government on setting aside sandpits and sand and gravel pits in the oblasts adjacent to Moscow. Not one square meter has been set aside.

The speaker stressed that it would be useful to develop river transport within the city, both for passengers and cargo, in order to improve the ecological conditions. Obviously we will have to work out this program together with construction workers and vehicle drivers.

A. I. Timoshenko, a representative of the initiative group of the Biryulevo-Zagorye microrayon, is given the floor. What do the people who come into the self-government committee talk about? They do not speak about empty store shelves or transportation difficulties, but largely about the ecology.

In the speaker's opinion, the construction south of Moscow on the Voronezh-Moscow route cannot help but affect the ecological situation.

But if you look at the normative documents of the SNiP [Construction Norms and Regulations] in accordance with which motor roads are planned and the expansion of cities is planned, there is protection from noise. When you go to the organizations involved in this planning, they say: we have supplements to this document, we have instructions. The instructions are in the department's interest, not the interest of residents.

The impression is created that housing is built up first, but later, when the construction is complete, the transport workers cut through their huge highways.

V. M. Dubov, a driver in the Seventh Bus Fleet, takes the floor. He referred to the difficulties that have developed with respect to spare parts and personnel.

The driver is always the switchman of the sector. And in addition to that, 15 to 20 percent of the buses stand idle in the yards, waiting for spare parts, and 10 to 15 percent are being returned to the yards from their routes again because of the poor quality of repair, poor roads, and accidents. The city is short of 4,000 bus drivers today. This is the full complement of three large bus fleets, and the city is being burdened with tremendous losses.

In order to compensate for the losses in providing transportation, a driver works 70 to 80 hours of overtime every month. Some overtime work reaches more than 1,000 hours a year with an annual norm of over 120 hours in accordance with the existing KZoT [Code of Labor Laws] of the RSFSR. We lack over 200 persons in our bus fleet alone. If we sum up all the losses related to the work interruptions which exist in transport, that is, the smooth functioning of the transport system, the time spent, the losses in labor productivity, the equipment losses, and so forth, the total expenditures needed to ensure efficient operation of the city's transport, they will seem meager compared with the astronomical figure for the current losses.

With an annual shortage of drivers over the five-year plan, two staffing schedules are being "cooked up again" in the bus fleets. The training combine of the Mosgortrans and the bus fleets have become a staging base for supplying sectors of the national economy and cooperatives with drivers.

The speaker expressed the opinion that shareholding by all enterprises and organizations in the city is necessary to compensate for passenger transport expenditures and ensure its profitability.

Speech by Deputy V. T. Saykin

The question of transport operation was brought up for discussion in the Moscow Soviet as a question of extraordinary importance, as a strategic question for the city's development. The poor transport operation is bringing a fever to all the city's production and social life, and in a number of cases it is paralyzing individual areas as well. There is no form of transportation today which can satisfy the residents of Moscow, the capital's guests, and the city's enterprises and organizations.

What is the reason for this situation? The imperfect structure of the organs that control transport, the lack of competence of some of the supervisory personnel, the inability or unwillingness to restructure the work on a new economic basis, and the serious shortcomings in organizational work by the Moscow Soviet Ispolkom, and primarily Comrade Kazantsev, the deputy chairman of the ispolkom.

Can we really justify the fact that vehicles spend 40 percent of the work time standing idle during freight handling operations, that a client holds multiton containers with scarce trailers for weeks, and that disruptions are systematically permitted in the delivery of freight and in hauling essential commodities from the Moscow railroad stations?

And this wasteful attitude toward transport use is being permitted under conditions in which the "Mosavtotrans" lacks sufficient resources to provide for the city's transportation needs and when freight service for the national economy is becoming worse and worse.

All this is taking place only because the managers of the main administration and "Mosavtotrans" have not succeeded in establishing a unified technological process, of which motor transport should become an integral part, together with the railroad, industry, commerce, and other consumers of freight. And for this it would be necessary to extend the delivery of goods in containers, to utilize rapidly unloaded trailers more extensively, to provide for efficient warehouse operations which receive goods around the clock, and to operate on the basis of overall interest in mutual relationships with clients.

And all these questions must be studied on a citywide scale, of course. But today, unfortunately, each person continues to live and work in accordance with his own regulations and procedures: the railroads in accordance

with theirs, the vehicle operators in accordance with theirs, and workers in commerce in accordance with theirs.

Centralization continues to predominate too much in organizing motor transport work, whereas we should have gone further toward decentralization and the establishment of leasing collectives in organizing some transport, including in commerce and for the delivery of small loads.

Transport and the client should work in accordance with a system of mutual interest. A system should be established for a unified technological process on a citywide scale. This applies both to departmental transport and general-purpose transport.

All these questions must be solved, but they are being resolved at present with difficulty and slowly. It is apparent that this is a consequence of managers' insufficient competence, a lack of understanding of the ways of restructuring transport, an inability to be guided by economic methods of operation, and insufficient attention to social problems.

In labor collectives, problems related to difficult working conditions, a poor material and technical base, and inequities in wages are acute.

This fair statement of the problems is being heard today in the speeches. Indeed, a great deal has not been done, and we are indebted to the transport workers. But it should be stated, not as an excuse, that Moscow has been seriously overloaded with other construction targets. We have been building for science, culture, and the social area, and unfortunately, the Moscow Soviet has not had enough people or capacities to maintain its own facilities. Today there are 1.8 million people working in the Moscow Soviet system. And for this reason, wherever you look there is a problem. We have warned our building committee and our organizations today that they will be responsible first of all for establishing a base for the Moscow Soviet. We have built many for others, and we have erected splendid buildings, but unfortunately, we have not built our own base.

The sizable outflow of drivers to departmental motor pools is affecting the transport services. I will speak about departmental transport while I am about it. We cannot do without it completely. It is needed, but not to such a large extent; after all, it is larger today than citywide transport. The best possible solution should be found here. Financial incentive is needed for enterprises to provide transport services for the city, and it should be worked out.

In a word, the task in organizing freight transport is to develop a new economic mechanism. A system of interrelationships between motor transport enterprises and the consignees of freight which provides for the efficient use of transport facilities and freight handling equipment. We need to work out an improved contract system and shift to economic methods of management.

And of course, we need to be concerned about strengthening the material and economic base to maintain motor transport. The low level of maintenance which exists today, the outdated technology in repair operations, and as a consequence, the short service life of engines after major overhaul—all these are the results of the overhead for the "Mosavtotrans" managers' incorrect policy in decentralizing repair operations.

There are no less problems in passenger transport operations, and if we do not provide for accelerated development of the metro, they will not be resolved. The government has adopted the proposals of the Moscow Soviet Ispolkom on the construction of new metro lines in the 13th Five-Year Plan. And now the Glavmosarkhitektura, together with the Metrostroy, must take every possible step to speed up planning and preparation for construction of the 50 kilometers of new lines that have been stipulated.

A great deal remains to be done in developing above-ground forms of transportation, the operation of which is the subject of a particularly large number of complaints from Moscow residents. It is unpleasant to learn of the ordeals endured by persons who use this transport in the morning and evening rush hours and the effect this has at times on their nerves and health.

And these forms of transport must be developed not only quantitatively, but qualitatively as well. We need new up-to-date rolling stock with greater capacity. At the same time, priority should be given to the ecologically clean types of transportation—the trolleybus and the rapid streetcar, and in the future in individual rayons of the city, magnetic-cushion trains.

Solution of the many problems associated with improvement in transport services depends directly on the USSR Ministry of Automotive and Agricultural Machine Building. But the impression is created that this ministry is not interested in or concerned about scientific and technical progress or the needs of consumers and transport workers.

We have been saying this for many years, but we have no good large-capacity buses, no new taxis or jitney taxis. The city is choking with the number of large-tonnage trucks, but we don't have the light trucks we need.

Industry is not turning out container carriers to carry large-capacity containers with equipment for self-loading and semitrailers for transporting metals, and there is not enough specialized rolling stock.

Because of the hopeless situation we have been compelled to produce rolling stock through our own resources such as bread vans, vans with constant-temperature bodies, container carriers, panel carriers, trailers, and semitrailer dumpers. A critical situation is now developing with the delivery of trolleybuses, and we might as well organize their production in the city and provide them ourselves so that Muscovites won't be left without trolleybuses.

We should add the fact that the delivery of those forms of transportation which the ministry produces is poor this year as well. While we acquired 4,350 trucks annually in the 11th Five-Year Plan, we received only 2,800 this year. The delivery of buses declined from 1,400 to 1,200 units. Delivery of the GAZ-2402 "Universal" passenger car was discontinued completely; in this connection, the services for passenger and freight transport were sharply curtailed. This is the kind of dead end the Ministry of Automotive and Agricultural Machine Building is driving the city into, you see!

We cannot help but mention that transportation service for the national economy of the city and Muscovites is becoming more and more complicated each year by the departmental interests of ministries such as the Ministry of Railways, the Ministry of Civil Aviation, the RSFSR Ministry of Motor Transport and the RSFSR Ministry of the River Fleet. Muscovites make up no more than 30 percent of the total volume of rail and air passenger transport through Moscow. Most passengers are in transit.

By increasing the volume of transport through Moscow and by overloading the stations and airports with transit passengers, they are putting an additional burden both on the city's economy and public transportation.

Is such a volume of transit traffic through Moscow necessary? I doubt it. We understand that the development and introduction of new routes are additional problems for the ministers, Comrades Konarev and Volkov. But we must proceed with this. Moscow's capabilities are not unlimited.

No one is saying that transit traffic should be eliminated completely, of course. But since we cannot do this, comrade ministers, let us invest our funds in municipal services for the city—to develop a transportation and road system and to build hotels. We cannot permit a situation as it is today, when thousands of transit passengers spend the night in stations.

The unjustified delivery to Moscow of transit freight, which is then taken out of the city by motor transport, should be added to this. Isn't it really paradoxical that the USSR Gosnab delivers coal to Moscow for the coal yards in Moscow Oblast, which is carried there by motor transport, and that the Ministry of Defense receives freight in Moscow which is then delivered all over the country?

It is sufficient to say that 17 percent of the 6 million tons of freight which is carried every year by general-purpose motor transport is shipped to warehouses of this ministry and the USSR Gosnab. And these two departments are not alone.

Moscow has literally been inundated by various departmental supply and marketing organizations and warehouses, from where the various loads are sent to all regions of the country. But after all, 6,500 freight-handling machines are drawn away just for the transshipment of this freight from railroad stations to warehouses and back.

Isn't it time to rid the capital of its role as an All-Union transshipment base? The Moscow Soviet cannot resolve this problem alone. We need the active assistance of the government, and we hope to receive it.

Some public groups of residents are raising questions about removing freight traffic from one street or another in the city and eliminating passenger transportation projects, and they suggest that terminals and bus yards not be built. They must be built, of course, they say, but not near us. But after all, all this can aggravate the transport service in the final analysis.

That is not the path we should follow. There may be only one solution to this problem—construction of new wide main arteries, up-to-date transport bypasses, bridges, and overpasses to provide for high-speed transport traffic. Only under this condition will we be able to live in an ecologically clean city and breathe clean air instead of motor vehicle smog. Otherwise we will suffocate, chiefly from our own selfishness.

The elections to local organs are coming up. This is a responsible stage in the life of the Moscow City Soviet and rayon soviets. An election campaign is a summing up of what has been accomplished, of the voters' instructions that have been carried out. The ispolkoms of the city and rayon soviets and their management organs must analyze the progress made in carrying out each instruction adopted for execution and do everything to ensure that what has been planned is done on time. This is the immediate and urgent task.

The deputies are moving on to consideration of the next question on the session's agenda—the plan for measures to carry out the voters' instructions which were received in the election of people's deputies of the USSR in 1989.

MOTOR VEHICLES, HIGHWAYS

New Motor Vehicle Association Created

904H0059A Moscow *SOTSIALISTICHESKAYA INDUSTRIYA* in Russian 2 Nov 89 p 1

[Article by I. Vladimirov, Moscow Oblast: "We Report the Details: Ticket for Tomorrow"]

[Text] Twenty-nine enterprises are uniting into a socialist concern named "AvtoKon".

Autobus-trolleybus-concern. The beginning letters of these words form the abbreviation for our new association. They also define its main purpose: to satisfy the demand of people for modern city and intercity transport. Today is the founding meeting and a small surprise. A trip on early models awaits representatives of interested enterprises, ministries and departments. New buses "LAZ-4206," 4207, "PAZ-3205," a still-undesigned bus of the factory of Kurgansk, sparkle

with fresh laquer, prominent in the city traffic unaccustomed to such beauty. In general, we are used to advertising tricks and wealth in exhibits. The ordinary passenger is interested in when will such a vehicle be available for all to travel in?

We are getting ready to answer this question, says the executive director of the concern, I. Fedyunin. Previous ways of work have exhausted themselves. And to admit honestly, I am tired of marching in place. New models find their way to the highway with difficulty, transport is insufficient, the existing park must be at least doubled in size. How? Reach into the government's pocket again, waste resources, and, in the end, fix nothing? Time dictates a different approach. We looked for it for 2 years, worked out economic models, thought through the politics of mutual relations of members of the concern, prepared initial models. And recently we proposed a program calculated to the year 2000, and the USSR Council of Ministers approved it.

I cannot tell you of all the refinements involved in the conception of a concern but only to note that it will allow us to concentrate means and resources and will tie all the interests of each enterprise to the final goal. And new organizational principles must open unused potential. I repeat, we do not ask for budgetary inflows, all the financing would come from our bank. We think of interesting suppliers of suitable assemblies by our good conditions. In the past they worked for some middleman, now they will work for a concrete one—the concern.

We are also getting ready to cooperate with partners abroad, as well. We are planning production of a luxury bus of the firm "Mercedes" with a toilet, bar, air conditioners, sleeping places, and other comforts not yet known to us. On such cars four stars will be painted. That means "highest class."

We have worked out ourselves sufficiently comfortable new models of trolleybuses. Roomy, economical, beautiful, they are ready for production. Incidentally, they have aroused serious interest abroad—in Japan and countries of South America. We shall satisfy the domestic market, then sell. Trolleybuses are now well-priced.

First Soviet on-Board Motor Vehicle Computer Announced

904H0059B Moscow SOVETSKAYA ROSSIYA in Russian 24 Oct 89 First Edition p 2

[Article by T. Surovtsev of Moscow: "With the on-Board Computer"]

[Text] In the Moscow center NTTM [Scientific-Technical Youth Creativity] "Kontakt," the first Soviet on-board automobile computer was designed and built. Trials of test models on cars which took part in an international European tour showed its effectiveness and economy.

The device saves the driver from the tiring necessity of constantly watching the entire dashboard. The "cruise computer" automatically maintains the speed of a car of any make with optimal settings. A one-chip microcomputer which regulates the delivery of fuel into the motor frees the driver from the necessity of even watching the accelerator pedal.

Unfortunately, says the director of "Kontakt," M. Pisakin, bureaucracies and organizations do not hurry to introduce novelties.

And it is a pity, because the design interested one of the trade-representative firms in Finland, which intends to present it at an international exhibition-trade fair in Turku. It is worthwhile for domestic car-makers to occupy themselves with the "cruise-computer."

RAIL SYSTEMS

Freight Containers Clog Moscow Rail Stations

904H0120A Moscow PRAVITELSTVENNY VESTNIK in Russian No 3, Jan 90 p 6

[Article by V. Yurteyev: "There Is Plenty in the Cars, But the Counters Are Empty"]

[Text] Over 20,000 containers with various goods are awaiting their turn for unloading at the Moscow Railroad Junction....

Last year the inhabitants of many regions of the country heard an abundance of explanations of the fact that railroad congestion was one of the reasons for the noticeable scarcity in the stores. The nine million people of Moscow were no exception here. The directors of the Ministry of Railways, the Mossovet and the USSR Procurators assured us that complete order would be established in this clogging of the transport arteries feeding the country. Their promises did not come true, however. The consists, including those with imported goods purchased for currency, as before, lost speed as they approached Moscow, or else stopped completely. Special container trains were standing, 200-300 kilometers from Moscow, waiting their turn for unloading. In them were clothing and food products, furniture and footwear, knitted goods and radio equipment, perfumes and cosmetics. It seemed that the Year of the Horse would begin, and transport affairs would go more quickly, but alas!....

Judge for yourselves. At the beginning of January, at the freight yards of the Moscow stations, over 27,000 tons of freight and 20,000 containers with consumer goods were accumulating, but only one-third were being removed. This is not only the fault of the railroad workers, however. The motor transport workers and consignees bear the responsibility for this along with them.

A year ago the USSR KNK [Committee for People's Control] revealed serious shortcomings in the organization of removing national economic freight, particularly

foodstuffs and industrial goods, from the railroad stations of the Moscow junction to the trade network. At that time a number of guilty officials were called to account. In May 1989 the ispolkom of the Mossovet and the USSR Ministry of Railways came to an agreement and adopted a resolution on how to improve freight delivery from the railroad stations of the junction, and to develop warehouse facilities for the consignees. At that time the USSR Council of Ministers issued appropriate commissions to a number of ministries and departments. Drawing in an additional number of drivers and motor vehicles and materials-handling equipment helped in 1989 to increase container removal by 11 percent over 1988.

From the standpoint of the perspectives, however, all these measures proved to be insufficiently comprehensive and not very efficient. Over 2000 cars have now been frozen awaiting unloading at stations and in "abandoned" consists.

The main reason for the recurring disaster—and this has been newly confirmed by the materials from recent checks made by the USSR KNK—is the chronic lagging behind of all the participants in the technological chain: "railroad-motor transport-consignees." For example, while in 1989 the arrival of large containers in Moscow increased by 25 percent, their removal increased by only 19 percent. This is one of the consequences of the fact that last year, indeed even earlier, Moscow had no unified plans, approved by the railroad workers, motor vehicle drivers and consignees, for removal of freight, particularly on free days and holidays. No one needs to be convinced that in days of 24 hours, and there are 168 of them in a week, the transport conveyer should be operating non-stop! So far, though, let us say, at the Moscow-Freight Yard-Yaroslavskaya station, only 88 enterprises and consignee organizations are working under these conditions. The other 3400 clients organize removal only on work days and only during the first shift.

The workers on the multi-shift schedule of the ZIL, AZLK, Kauchuk, Moskabel, Elektroprovod, Lakokraska, Znamya Truda and Pluton plants, the State bearing plants 1 and 2, and Motorized Tractor Electrical Equipment plants No 1 and No 2 accept freight only up to 1700 hours. Freight is accepted just as "dynamically" by organizations having closer ties with the population: Pharmaceutical Warehouse No 1 bases of Mosobuvorg and Mosgormashoptorg No 2, and hundreds of others. Things have come to the point at which some railroad stations in the capital, and particularly that same Moscow-Freight Yard-Yaroslavskaya station, do not even unload cars at night, and all work stops at 2000 hours. Just how, then, did the Mossovet monitor its commission to organize the work of enterprises to accept freight and containers in two or three shifts? In reality, one pocket (of the Mossovet—resolutions and of the railroad workers—freight) has plenty, and the other pocket (of the consumers of the products and purchasers of the goods) is empty!

No one paid attention on time to the fact that the system existing in Moscow for centralized delivery and removal of freight by motor vehicle transport from the railroad stations is on the whole economically faulty and disadvantageous for the freight owners and the population. Here are the facts. In a contract for 1989, Motor Vehicle Combine No 8 was charged with removing 570 tons a day from the Moscow-Freight Yard-Yaroslavskaya station. The combine, however, took on only 425 tons, which corresponded to the kilogram to the figure of the State order established for it by the Mosavtotrans Production Association. As a result, Combine No 8 fulfilled the State order, but at the same time daily underdelivered about 80 tons of the freight arriving at the station to the contractual recipients. The norm for removal "as possible" for Motor Vehicle Combine No 8 was approved in February of last year by a resolution of A. Smenkovskaya, state arbiter for the City of Moscow.

Solving the problem of prompt unloading of the cars in many ways depends on the motor vehicle drivers themselves. Let us say, today they have a great shortage of storage areas. At the same time, of the 50,000 square meters of the Severyanin warehouse, 27,000 have been leased to various enterprises, which use these facilities to store their recently received freight or as a transshipping base. Indeed, the rest of the warehouse area is only half used by the vehicle drivers themselves. Alongside the station, during this time, cars stand idle, waiting to be unloaded. With the norm for idle time being 8.3 hours, the actual idle time at the Moscow-Freight Yard-Yaroslavskaya stations last year was 46.1 hours, for which a fine of 233,000 rubles was exacted. The nation's money was transferred from one item of expenditure to another, and all the "Mismanagers," as before, smile nicely at one another, but the personal instructions of V. Saykin, chairman of the Mossovet ispolkom, on freeing the leased areas has so far been unfulfilled.

The conversation that took place the other day at the Division of Transport and Communications of the USSR Committee for People's Control, with a large group of supervisors of railroad workers and motor vehicle drivers, convinces us: There is, as before, a great lack of coordination in their work. At the Moscow junction they have stopped keeping count of the fulfillment of the daily plan for freight removal, the idle times of the machines for loading operations and stopped entering the fines for nonfulfillment of the established norms. This has virtually taken away the mutual material responsibility for efficiency in using means of transport and has had an adverse effect on providing transport.

Moreover, the practice that has formed has made it possible for the vehicle drivers and railroad workers, given the steady piling up of freight at the stations, and the failure to ensure its removal in the necessary amounts, even to console themselves—with bonuses. Motor Vehicle Combine No 15, for overfulfillment of the plan for 9 months of 1989 for removing freight from the Moscow-Freight Yard-Pavletskaya station, received

36,000 bonus rubles. At the same time, it failed its contractual obligations, but for this, as we already know, the material and moral damage to the guilty party was meager.

At a meeting at the USSR KNK, the names were called of those who, in the opinion of the national controllers, should bear direct responsibility for the social-political tension caused by the late unloading and delivery of products to the consumers and buyers. These were Ye. Kazantsev, deputy chairman of the Mossovet ispolkom, I. Paristyy, chief of the Moscow Railroad, A. Koryakin, deputy general director of the Mosavtotrans Production Association, and L. Tolstosheyev, chief of the Moscow Division of the October Railroad.

Under the present complex conditions, each of us should be deeply aware of the need to make his contribution to the general affair, or else there will be no progress, and we will feel no positive changes. Any action or, on the contrary, display of inertia by the supervisor and the worker will all in the final analysis also be reflected in the situation on the consumer market, and in our prosperity, well-being and mood. We must constantly remember this and each one must do his job at his work place conscientiously, with complete efficiency.

Railway Freight Losses Cited

904H0120B Moscow PRAVITELSTVENNYY
VESTNIK in Russian No 3, Jan 90 pp 6-7

[Article by Ye. Kolesnikova: "Spend Millions To Guard Freight and Save Billions"]

[Text] A wretched job has been done of guarding freight on the railroad. The yearly losses from theft are tremendous. It is obviously simpler and more reasonable to spend millions on organizing efficient work and on protecting freight and thus to save billions.

If the rails of the country's chief mainlines were combined into a single through roadbed, they could circle the equator three times. The comparison is clear. Railroad workers often cite it, in illustrating the power and far-flung nature of our roads. I suggest something else, no less impressive.

Imagine a department store in which there are no shortages—of spare parts for motor vehicles, imported appliances, fashionable clothing and footwear, laundry detergents, etc.... This store could operate for an entire year with a commodity turnover of several million rubles, by trading in just the goods stolen on the country's railroads.

For the sake of objectivity it must be confessed—in the last decade the situation has noticeably improved. In 1980, when the USSR Council of Ministers and the CPSU Central Committee adopted the decree "On Measures To Ensure the Safekeeping of National Economic Freight and Intensify the Struggle Against Theft on Railroad and Water Transport," the looting situation was five times greater. Let us labor under no delusions, though: the theft curve has now obviously risen again. The Ministry of Railways is worried, and the legal protection

authorities, too. It is just that the departments have different opinions on the problem. Let us try to analyze them.

We turn to the facts, and they, alas, point to a distressing thought—it is really a lazy person who steals. It is extremely simple to ship goods by railroad: the car is loaded, the door shackle is wound around with a wire, the seal is applied—and they are on their way. The procedure is based on complete trust between the suppliers and the freight transporters. Not everyone always understands trust, however, as a procedure of the highest level. Here is the proof.

According to information from the USSR MVD [Ministry of Internal Affairs], discrepancies have increasingly been noticed between the weight indicated in the documents and the actual weight—they make up 10-13 percent. This is particularly characteristic of the Central Asian, North Caucasus and Transcaucasus regions, and of the Lower Volga area. For example, in 20 cars checked by Internal Affairs authorities last summer at the Syrdarin station on the Central Asian Road, a shortage of 33 tons of tomatoes was discovered.

The consignors had the opportunity to underload the cars when the railroad workers essentially stopped checking the weight of the freight indicated in the documents. Light-fingered workers, purposely overstating the weight and volume of the goods transported, also had this opportunity. Another example. In March of last year, a tank car arrived at the Chelyabinsk station. Even its external appearance was suspicious: the drain valves were broken off, the sides were covered with rust and mildew, but according to the documents, there were almost 5000 decaliters of wine in the tank. A biological expert examination established that there had been no beverages in the tank for at least three months. For almost the same length of time the transport police workers had tried to prove that there had been no theft.

In a word, there had been opportunities for theft right up until the consist moved from the site. It was not profitable for anyone to check and weigh the cargo. The supplier had reported in the documents for the products shipped, and the railroad workers—for what was transported—if only, frankly, for the safeguarding of the seal. It is not by chance that an investigation of any conflicts begins with the question: is it intact? If it is, what claims can be made against the railroad?! Is the freight short? Let the controllers trace this. But how? There are only a thousand scales for 7000 freight stations. Probably, the rest of the goods are literally estimated with the eyes. The railroad workers have their own arguments: they say, it is not all that simple to weigh an entire consist, each car has to be driven on to the scales. Here, however, the Odessa enterprise Tochmash has begun to produce electronic attachments for the scales—a car can be weighed in motion by means of them. The Odessa workers have so far not received a single request for them.

Of course, weight manipulations are only one of many methods of removing currency from the State pocket.

Various goods go along the steel roadbed, including those accurately packaged, counted by piece and dispatched with a seal on the door. Is there any guarantee here that the goods will arrive at the consignees intact and well-preserved?

According to information from the USSR MVD, 80 percent of the thefts from cars and 95 percent of those from containers are carried out by the simplest method—through the doors. One need not be a skillful burglar here—so far, instead of locks, they use...ordinary wire. The criminals easily fake the simple plastic and lead seals.

V. Logunov, chief of the Main Administration for Container Transport and Commercial Operations of the USSR MPS [Ministry of Railways], opened wide the doors of the office cupboard. On the shelves were locks of various designs.

"As you can see, railroad workers also look after the safekeeping of the freight," Logunov commented on the collection. "Last year we announced a competition for the best locking device. The activity was fantastic! Some 600 suggestions came in, and 6 of them were selected. An experimental batch has already been produced—2500 locks. Of course, this is still not enough, but it is also naive to suppose that a lock can guard against plunderers. In my opinion, the police should put more energy into their preventive work."

I cannot help but agree. In the first place, the locks on the doors of our apartments have still not proven themselves. It is easy to imagine what it would be like if they were not there at all. In the second place, it would not be a bad idea to carry out preventive measures amidst the railroad transport workers themselves. Having data available on the routes of particularly attractive freight, and knowing the storage conditions, they themselves often become plunderers.

According to information from the USSR MVD, last year criminal groups were revealed amidst the railroad workers at the Inskaya (West Siberian Railroad), Armavir and Aldy (North Caucasus Railroad), Sharvan and Vatagu (Azerbaijan Railroad), Chita (Transbaykal Railroad), and Uzhgorod (Lvov Railroad) stations. Particularly large numbers of thefts, mainly of export and import goods, were put down to their account. For example, in June of last year Galebyan, Arshakyan, Baburyan and other workers of the Transcaucasian Railroad stole 136,000 rubles worth of imported glassware from a car.

The safety of freight going to the West from the Far Eastern region is particularly alarming. According to a strange tradition, it is not as a rule checked at commercial inspection points. If a train runs from West to East, it may be inspected. A group of locomotive engineers at the Irkutsk-Classification station took advantage of the situation—they stole only from cars traveling to the west.

Logunov agrees, "Yes, our personnel is still not irreproachable, but it cannot be stated that railroad workers

have pilfered everything. No one thinks that. According to the data of the Administration for Supervision of the Execution of Transport Laws of the USSR Office of the Public Prosecutor, the share of the MPS workers is only one-third of the total number of thefts."

"In analyzing the reasons for the thefts, I would single out two important points," says B. Vankovich, deputy chief of the Administration for Supervision of the Execution of Transport Laws of the USSR Office of the Public Prosecutor. "In the first place, it is actually easy to steal. I followed with interest last year's competition of the MPS for the best lock, and the best seal. After all, though, ten years ago the USSR Council of Ministers and the CPSU Central Committee obliged the railroad workers to develop and introduce improved sealing systems and locking devices. But just as before, a wire kink dangles on the doors, with which even a teenager could cope. The train may happen to stand on an open track section for about 15 minutes—in this time a smart citizen manages to pull several packages of goods out of the car. One need not even mention the "abandoned" trains, which stand on the tracks without moving for several days, or even for a week. In just nine months of last year on the Muromsk route, for example, 600 consists stood idle—only one out of six was guarded. As a result, 12 thefts were committed there, and the loss was 14,000 rubles.

"Sometimes one comes across anecdotal situations in criminal cases. A batch of Japanese jackets was stolen from a train. The investigation led to a small village. Its inhabitants, observing the 'abandoned' train, could not resist the temptation and borrowed the scarce overseas items. They say, they removed them in carts. The trackers found one jacket...in a dog kennel—it had been used to bed down the dog. It is a bad, sad anecdote.

"In the second place, it is time to revise the attitude toward goods that have already been unloaded from the cars or are awaiting dispatch," continues Boris Mikhaylovich. "Recently I was at a little station near Kazan, and I saw how the freight yard was guarded there. There were only two guards on a territory of six square kilometers. Neither a fence nor a telephone. Is it difficult to steal here? Moreover, they do not as a rule steal alone—they join into criminal groups. They drive the trucks into the station warehouses, and sell large batches of goods through the stores. A well-adjusted mechanism arises, and with each newly arriving consist it draws in new people. Let us discuss the deep social roots feeding organized crime. Elementary slipshodness partially feeds it. After all, every fifth container center has no enclosing fences at all, and every third—fixed check-point conditions. Almost half of the warehouse facilities are not equipped with protective signaling. Have we, then, forgotten the old adage: they steal what lies in temptation's way?"

According to the information of the MVD, a group of criminals stole two containers of knitwear and radio equipment worth 70,000 rubles from a container platform at the Aldy station. At the Tashkent-Freight Yard,

members of a criminal group (it included railroad workers and representatives of the organization for whom the freight was destined), removed three boxes of imported jewelry worth 35,000 rubles from the warehouse.

Is it worth adding to the examples to prove the obvious: valuables must be guarded.

"The absence of elementary guarding may become the cause of serious conflicts," says Vankovich. "Not long ago Armenian railroad workers made claims against their Azerbaijani colleagues. The huts for the earthquake victims were received in terrible condition. I went with a group of colleagues to investigate. They explained—even before the consist crossed the border of Azerbaijan, the huts were mutilated: the fittings were pulled out with the sockets, the glass was broken, the furniture was broken. It appeared that teenagers had been 'having a good time'...."

Listening to Boris Mikhaylovich, I remembered a story by V. Grigoryev, the fantasy writer, "Rog izobil'ya" [Horn of Plenty]. His hero devised a unit, into the narrow end of which all kinds of scrap was loaded, and from the wide end excellent things came out—television sets, refrigerators, clothing. During the tests, someone asked: but does the machine have a reverse, that is, does it run backwards? The inventor was surprised—why? They said—it has to. He did it, but something jammed. Since then the horn of plenty has meticulously processed things into scrap. I will not take the risk of drawing direct analogies with the railroad, but all the same, something similar is happening in its work.

"Alas, there are not enough guards," Logunov acknowledges. "The amount of freight that must be guarded has increased 5-6-fold, and there are only one-third of the people. Just try to entice anyone to travel around in a sheepskin coat from one city to another for 120 rubles."

True, it must be noted that, in addition to the sheepskin coat, there are other benefits—rations, various additional payments, free travel when on leave. If this is not enough, however, we must think about what else people are interested in. Meanwhile, the VOKhR [Administration of Internal Protection of the Republic] workers are giving themselves an incentive. Two riflemen of the Moscow Railroad guard stole 11 boxes of Romanian shirts, immediately making themselves 10,000 rubles richer. At the homes of other "guards," large quantities of tooth paste, soap and motor vehicle spare parts were discovered. Everything had been taken from railroad cars. A VOKhR worker can, of course, have one-third of his salary exacted for oversight, but everyday "arithmetic" shows that it is more profitable—to steal....

Workers from the transport police and the office of the public prosecutor go off on business trips on an average of 300 days a year. There are scarcely over 2000 of them for the entire country. They travel around all over, determining where, by whom and when a seal was torn off, at what site things were stolen, where the scarce

goods disappeared to. The Ministry of Railways has only to decide which of the roads will pay the shipper for the loss.

In the last analysis, however, the negligent management has to be paid for, not out of some abstract purse called the State's, but by each one of us—and not only with money and peace of mind. The interrelation here is obvious. The flow of goods arriving on the "black" market is not drying up, crime is increasing, and that means social tension as well.

According to information from the USSR MVD, in the last two years over 50,000 thefts have been committed on railroad transport, and over 10,000 criminal actions have been instituted. Criminal proceedings have been instituted against about 11,000 persons. Losses from thefts constituted over 11 million rubles.

"We are prepared to propose measures making it possible to cut thefts on the railroad to a minimum," says S. Galakhov, deputy chief of the Main Administration of Internal Affairs in Transport of the USSR MVD. "Our proposals hardly please MPS workers. The point is that on the railroads valuable freight is so far being entrusted to people who bear no material responsibility for it. The secretariat of the VTsSPS [All-Union Central Trade Union Council] and USSR Goskomtrud have tried to put the situation right—they adopted decrees, gave recommendations, and proposed, for example, that contracts be concluded on the brigade form of material responsibility. But the measures did not take root.

"It has long been noticed, that it is difficult to make a person engage in any business that is unprofitable for him," continues Sergey Sergeyevich. "In our opinion, it is easier for the railroad workers to pay damages for thefts than to invest funds in protection and locks. So why not relieve the MPS of the need to keep track of freight safety. Let State insurance companies, which should have been created long ago, deal with this. Part of the funds due the railroad for high-quality transport can be turned over to the insured. An entire system of economic incentives can be worked out that will arouse everyone to high-quality work—the suppliers and the railroad workers and the insured themselves."

The idea is not a new one. Similar insurance companies are in operation abroad, fully paying for their existence. They may even offer helicopters to accompany particularly valuable freight.

There is also positive experience in our country. As we know, thefts of spare parts, units and assemblies for motor vehicle equipment occupy a leading place on the tremendous list of stolen goods. The party that suffers is the USSR Ministry of Automotive and Agricultural Machine Building. The USSR Ministry of Railways is sympathetic—in 1986 a special procedure was established for escorting passenger vehicles for export with through details as a militarized escort. A few runs showed that motor vehicle equipment could be delivered to the destination point safe and sound. The guards were well paid, and the escort conditions were acceptable. The

MPS assigned an old passenger car in which they could relax and prepare food. Then they suddenly stopped assigning it—they said that there was nothing to carry passengers in. As a result—according to the data of the State Inspectorate on Quality of the Ministry of Foreign Economic Relations, in 9 months of 1989, almost 8500 export Zhiguli were delivered to border points and seaports in damaged condition, and of them over 4000 pieces were the fault of the railroads.

"At commercial inspection points for trains," comments S. Galakhov, "we are now obliged to create efficient police covering forces. This stops the plunderers. But the colleagues of the police then have to work...for the railroad workers—after all, they are the ones who should make the commercial inspection of the trains."

At the All-Union Conference of Railroad Workers, figures were heard which cannot help but be startling: according to the data of experts, the country loses 10-12 billion rubles yearly because it fails to keep freight safe (including that due to its late delivery and removal, and spoilage). Perhaps it is time to realize—it is better to spend millions sensibly for protection and for improving equipment, and to save billions in return.

Railcar Shortages Cause Congested Ports, Transshipment Centers

Overview of Transportation Problems

904H0016A Moscow TRUD in Russian 11 Oct 89 p 1

[Series of Articles by various correspondents: "The Customer is the Loser"]

[Text] "But the Lines are Growing....," "The Shortage is Under Lock and Key," "No One Is To Blame....," "Who Will Establish Order?," "They Did Not Get to the Counter"—In these articles which were published in TRUD last week, the newspaper raised the question of the glut of food and consumer goods at railway stations and seaports. For weeks and even months, railcars have stood filled to capacity with shortage goods while the most elementary items cannot be purchased in stores. TRUD appealed to the procurator's offices and people's control agencies with a request to establish proper order. The newspaper published the demand of A. Korshunov, member of the USSR Supreme Soviet, to the government on this issue. However, TRUD still has not received official answers to the criticism. Reports from on-site continue to arrive at the editorial offices: The emergency situation remains as before.

Situation at Leningrad Seaport

904H0016B Moscow TRUD in Russian 11 Oct 89 p 1

[Article by D. Struzhentsov, TRUD correspondent, Leningrad: "And Railcars Stand on Sidings..."]

[Text] Two high-tonnage vessels whose holds contain 15,000 tons of Cuban sugar await unloading in Leningrad seaport. The vessels should have been emptied long ago but the railroad has not provided enough railcars.

Not a day goes by that rebukes, in far from refined tones, pour in to the railroad workers. The railroad leadership is already long accustomed to this, they withstand the onslaught, but they do not provide additional railcars.

Yes and where will they get them if more than 2,000 of them loaded with all sorts of things, including even such shortage items as imported soap, laundry soap powder, leather goods, and televisions, have piled up on the approaches to Leningrad. All of those things which cannot be found during the day with a flashlight in the majority of Leningrad's stores.

There is one reason for the jams on the approaches—disorganization. Truck transport enterprises do not operate on schedule, unloading of railcars and trucks is carried out slowly, and many recipients do not hurry to get their freight. Therefore, this very freight is moved from railcars to goods warehouses at tortoise-like speed. It happens that railcars with shortage goods are simply redirected from Leningrad to other cities of the nation: there is no one to unload them here.

And here is one more case of disorganization which verges on bungling: a bountiful harvest of superb potatoes was grown without nitrates on the fields of the Agrotekhnika Sovkhoz near Leningrad. However, Leningradovoshechprom has refused to take the potatoes and has concluded a contract for delivery of tubers from Georgia and Poland. Now trainloads of potatoes are going to the city on the Neva and 600 tons of Leningrad potatoes are making the trip to remote Tyumen. Just where do you come up with railcars under such "management?"

Situation at Odessa Seaport

904H0016C Moscow TRUD in Russian 11 Oct 89 p 1

[Article by V. Golub, chief of Odessa Port Commerce Department: "Hello, Recipients"]

[Text] Odessa Port has recently experienced considerable difficulties with off-loading imported freight, among which are quite a bit of severe shortage items. Thanks to the articles in TRUD and other newspapers, the railroad workers have provided us with such a large number of railcars over the last several days that we have been able to unload 300 containers. I simply cannot recall another such case.

We should be happy about this but we still have 560 containers of mainly food cargo here as before. And neither the railroad workers nor we are to blame for this. The fact is that Soyuzplodoimport All-Union Association bought them, seamen delivered them to Odessa Port, the railroad workers are ready to take them to their destinations, but the whole question is, where do we take them? There is no so-called voucher with the recipient's address and this is the hold-up. Many of the containers have been at the port since August 29. And 4,000 tons of food have piled up at the port which the consumer is waiting for.

Situation in Moldavian SSR

904H0016D Moscow TRUD in Russian 11 Oct 89 p 1

[Article by P. Rashkov, TRUD correspondent, Moldavian SSR: "Jams On the Border"]

[Text] Yesterday morning, 790 railcars loaded with imported freight, including clothes, furniture, and other consumer goods had, accumulated at Ungeny border station of the Moldavian Railroad.

If you consider that the station can accept up to 900 railcars at one time, the situation does not appear to be too bad. But not more than 500 railcars should be here simultaneously under the normal operating rhythm. Thus there is some lagging behind anyway and the results of yesterday's labor confirmed: yesterday the Ungeny railroad workers shipped 200 tons of cargo less than tasked to addressees within the country.

The main cause of the delay is the lack of empty railcars. The fact is that the track in neighboring Romania is somewhat narrower than ours and therefore all freight arriving from abroad must be reloaded into other railcars at Ungeny. There are constant delays here. "We must load imported consumer goods into first-class railcars," explains A. Dzekash, chief of the Moldavian Railroad Operational Distribution Department. "We never have enough of them. We have an even greater problem with adaptable platforms for transporting large cargo containers. We would have had to send 360 loaded railcars to Ungeny on 10 October in order to ensure normal station operations and we only had half of what was required.

Problems with empty railcars are explained by various causes. One of the main ones is the Fall peak for shipment of agricultural products which is given priority in the republic when the harvest is in full-swing. It appears that MPS [USSR Ministry of Railways] plans took this into account—neighbors would have to help the Moldavian Railroad. In particular, it was proposed that on 10 October Odessa Railroad would provide 200 empty covered railcars, but less than a third of what was planned arrived from there. The result is that imported consumer goods are stuck on the border only because the USSR Ministry of Railways cannot cope with normal deliveries to the consumer.

Railways Automation, Communications Equipment Displayed

904H0025A Moscow ELEKTRICHESKAYA I
TEPLOVOZNAYA TYAGA in Russian
No 10, Oct 89 pp 18-24

[Article by engineers N. N. Shvetsov and B. S. Itskovich: "Innovations in Railroad Automation"; photographs accompany text]

[Text] Visitors to the "Zheleznodorozhnyy transport-89" [Railroad Transport '89] exhibition displayed considerable interest in the new automation, remote control, communications, radio, and computer hardware systems

for controlling train traffic and the operation of stations, depots, terminals, and locomotives; the various automated work positions; and the technical devices for passenger service automation. Increased capacity on the railroads is provided by widespread introduction of the latest systems for dispatching and block-relay centralization and automatic block signaling.

Displays in the Soviet section of the exhibition demonstrated the principal trend of scientific and technical progress on Soviet railroads—overall mechanization and automation of engineering processes. The automation, remote control, communications, radio, and computer hardware systems play an important role in this. By being based on new components which have increased functional capabilities, they make it possible to increase the carrying capacity of freight-intensive sectors of the railroad network and the processing capacity of railroad stations and junctions and to ensure the safety of train traffic.

Centralized traffic control based on microprocessors, DTsM-DON, is among the displays at the exhibition. The system, which is intended for automated control of train traffic, provides on-the-spot information which makes it possible to monitor train location, assess situations that arise, work out recommendations and the best solutions, and influence the course of the technological process in a timely manner.

Thw DTsM-DON consists of a unitized complex for the central control position with dispatching operations equipment, as well as devices for adjustment, monitoring and diagnostics. The system has cyclic, sporadic, and combined methods of scanning the objects monitored. The scan cycle in this process takes 5 seconds, the time to transmit one command is 0.5 seconds, display of the train status takes 5 seconds, and a response to the dispatcher's inquiry takes 5 seconds.

The DTsM-DON was developed by specialists at the Rostov Institute of Railroad Transport Engineers (RIIZhT) and is being manufactured by the Kharkov Electrical Engineering Plant "Trans-svyaz" of the Scientific Production Association (NPO) "Soyuzzheldoravtomatizatsiya."

A complete set of equipment for the "Minsk" **centralized traffic control (DTs)** position was shown at the exhibition. The equipment is designed for remote control and supervisory control of railroad automation systems. It can be utilized as a remote control system for the work positions of a train or junction dispatcher, a duty stationmaster, the dispatcher on duty in a parking or switching area, or a power dispatcher. The "Minsk" DTs makes it possible to control sectors with up to 100 stations from one work position and for several supervisory positions, one of which functions in the display-control mode and the others in the display mode, to work with one area that is being controlled.

Compared with the standard DTs systems the "Minsk" system is compact and occupies 7 to 10 times less operating area (3 to 5 square meters altogether), the

expenses for design work, installation and adjustment of the complete unit are 5 to 10 times less, and the length of time to complete the design work, installation and adjustment are 20 to 25 times less. On the other hand, the reliability and noise immunity of the "Minsk" system are 10 to 20 times higher than the standard DTs systems. It was developed as part of the complex of devices for a unified traffic control center and it provides the opportunity to control sectors that are equipped with the special line devices of the "Minsk" DTs as well as the devices of the "Neva" DTs. The adjustment and troubleshooting process has been automated in the equipment.

It should be noted that the "Minsk" DTs equipment has not only been displayed at the exhibition. It is now in operation in six sections of the Belorussian Railroad and it is being planned and installed in several more sections on this and other railroads. The system will be utilized in a unified traffic control center on the Tselina Railroad.

Scientists, engineers and technicians of the Belorussian Railroad's Design and Engineering Bureau developed, planned and built the "Minsk," while components to complete the system are being manufactured by plants of the Ministry of the Electronics Industry.

The USAB-Ts automatic block system with track circuits on a frequency of 25 hertz was also displayed at the "Zheleznodorozhnyy transport-89" exhibition. It was designed for spaced control of train traffic on single-tracked and double-tracked sections by using the data on availability of up to five blocking sections. The principle of the system's operation is based on the use of a continuous track circuit on a frequency of 25 hertz as a path sensor.

The status of blocking sections is monitored by track circuits with insulating joints. Traffic signals are linked with each other by two pairs of line circuits. Railroad crossing warning devices are switched on from any installation, with or without signals, regardless of its type.

The circuit for changing the direction of trains is a double-wire circuit. It is common for single-tracked and double-tracked sections. An auxiliary mode for changing direction monitors the actual availability of a line when there is a false indication that no more than two track circuits are in use. Data on the malfunctioning of specific circuit components in the signal installation is put on a display unit in the relay element base of the miniature REL relays, which have first-class reliability. The circuit solutions of the signal installations, 12 in number, have been standardized.

The USAB-Ts was developed by the VNIIZheldoravtomatizatsiya [All-Union Scientific Research Institute for Railroad Automation] and the Moscow Institute of Railroad Transport Engineers (MIIT). The system is being manufactured by the Leningrad Electrical Engineering Plant of the NPO "Soyuzzheldoravtomatizatsiya."

The BRTs-NSB automatic blocking system is used for the sections with reduced ballast resistance. A model of it was displayed at the exhibition. This system operates on the basis of track circuits of 150 meters or more, depending on the actual ballast resistance. The frequencies of the signal current in the track circuit are 420, 480, and 580 hertz and the modulation of the signal current is 8.12 hertz.

The automatic blocking system operates efficiently when the ballast resistance is reduced to 0.04 ohm-kilometers without the installation of additional insulating joints within the blocking sections when any form of traction is used. The VNIIZheldoravtomatizatsiya developed the BRTs-NSB, and it is manufactured by the NPO "Soyuzzheldoravtomatizatsiya."

The ALS-YeN automatic locomotive signaling system with increased noise immunity and application is among the exhibition's displays. Together with the SAUT [automatic brake control system], the ALS-YeN system prevents passage through inhibit signals and movement above permissible speeds on station sidings. Modern components and self-regulating units have been put into the ALS-YeN and reliability has been improved. The system was developed by the MIIT and the VNIIZheldoravtomatizatsiya.

The automatic system for overall inspection of the technical status of rolling stock when the train is in motion, the **DISK-BKV-Ts**, was on display at the exhibition. It detects malfunctioning assemblies in the undercarriage of rolling stock when the train is in motion in order to ensure safety. The system includes these subsystems: the DISK-B (base subsystem) for detecting overheated journal boxes, the DISK-K for detecting defects in wheel rolling, the DISK-V for components that are pulled, and the DISK-D for centralizing the data from line monitoring points for the traffic control position. The DISK-B subsystem incorporates structural and functional completeness, and the three others can only supplement it at one monitoring point or another.

The system includes open line and station equipment and equipment for the central position. Data are transmitted over a distance of 10 kilometers from the open line equipment to the station equipment and up to 400 kilometers from a line monitoring point to the central position.

The speed limit is 250 kilometers per hour for passenger trains being monitored and 125 kilometers per hour for freight trains. The system indicates a sequence number for a malfunctioning car (up to 50), the number of the defective axle on a car (up to eight), the side of the train, the type of journal box component on a car, the time of the observation, the total number of cars in the train (up to 399), and the sequence number for changing the train. The DISK-BKV-Ts system was developed by specialists of the Urals Division of the VNIIZhT [All-Union Scientific Research Institute of Rail Transport].

Mechanized and automated facilities have been extensively developed for sorting consists in classification

yards. A complex for gravity yard control based on the KTS LIUS-2 was on display at the exhibition. It was designed to automate car classification, and it has two operating modes—programmed and routing. The complex is equipped with facilities for logical processing of data on the objects and devices being monitored and introducing and rapidly correcting the sorting program, and it has functional microprocessor elements to control monochrome and color graphics terminals. The complex was developed by a branch of the VNIzheldoravtomatizatsiya (in Rostov-on-Don). Components are being manufactured by the Kharkov, Dnepropetrovsk, and Armavir plants of the NPO "Soyuzzheldoravtomatizatsiya."

A device providing redundancy for URP1-1 safety devices attracted specialists' interest at the exhibition. It provides redundancy for two groups of 15 safety devices each which are included in power supply circuits of the same type, and it automatically switches on a spare safety device and a warning of the defective device in alphanumeric code. The unit has a plug-in connection and circuit breakers in the switching circuits of the safety devices in operation. The URP1-1 was developed by the VNIzheldoravtomatizatsiya and manufactured by the Brest Electrical Engineering Plant of the NPO "Soyuzzheldoravtomatizatsiya."

Radio communication systems were widely displayed at the exhibition. One of them was the "Transport-PRS-D" system. It is designed to organize the control of train traffic expeditiously in dispatch sections. The system operates in the traffic frequency bands of 2, 160, and 330 megahertz with a suitable number of channels in each band—2, 132, and 36. It enables nine commands to be transmitted to the locomotive engineer and seven reports to be transmitted to the dispatcher.

The system enables train locomotive engineers to call and converse with train power and locomotive dispatchers in a duplex mode, with users on the train and dispersed throughout the section, and with locomotive engineers, and provides for the transmission and display on a panel of commands and reports, data from a controlling computer for a locomotive, commands to stop a train electronically, and an emergency call from a driver when a radio channel is in use. It also provides for the transmission of discrete information in a simplex mode and automatic and manual control of equipment shown on a display panel and LED indicators.

The "Transport-PRS-D" includes the SR-1 dispatch control station, the RS-1 fixed duplex radio stations, the RS-2 fixed simplex radio stations, the RV-1 mobile two-band radio stations, the RN-12B portable radio stations, and the RL line manager [rasporyaditel], a device for remote control of coupled trains. In the SR-1 and RV-1 equipment, operations to control and monitor blocking are performed by microcomputers based on a Series K588 microprocessor complex. The modes of operation, commands and reports are displayed on the control consoles of the SR-1 and RV-1, on a fluorescent panel with 16 symbols.

The "Transport-PRS-D" system was developed by scientists and specialists of the VNIzheldoravtomatizatsiya (USSR) and the "Elektron" Production Association (Bulgaria), and is being manufactured by the "Elektrosignal" Production Association (USSR).

The "Transport-RORS-L" dispatch line radio communications for repair and operations was also on display at the exhibition. Designed to organize on-the-spot control of operations and repair work, it enables those managing repair operations to have radio contact with the power dispatcher, the dispatchers for track subdivisions, signals and communications, and enables actions to be coordinated with the train dispatcher, the duty stationmaster, and others.

The "Transport-RORS-D" [sic] includes the SR-34 control station for dispatchers, the RS-6 fixed radio stations, and the US-2/4 coupling unit. The radio network is organized in a duplex mode with the use of a group call. The dispatch line radio communications unit operates in the 160-megahertz band with six working frequencies. The "Transport-RORS-L" system was developed by the VNIzheldoravtomatizatsiya and manufactured by the "Orion" plant (in Ternopol).

The "Sirena-S" system provides an automatic warning on radio channels for track brigades working on switches about trains and switching consists approaching their place of work for each of 20 groups of switches. It incorporates expanded functional capabilities and makes it possible to organize 20 warning channels on one carrier frequency. The UGO-V mobile warning loudspeaker and the UGO-P transportable version were also displayed at the exhibition.

The K-24T "Astra" equipment for multiplexing cable circuits to organize engineering communications was among the communications displays at the exhibition. It was developed for multiplexing two-cable communications lines and makes it possible to obtain 12 grouped and 12 direct channels on a voice frequency in the spectrum of 12 to 108 kilohertz. Operations and engineering communications and automated general-purpose communications, as well as a link for transmission of digital data, are organized with the aid of these channels.

The apparatus includes the SO-K-24T terminal rack and the SP-K-24T auxiliary rack, as well as the standard line channel for the K-60P transmission system. The K-24T was developed by the VNIzheldoravtomatizatsiya and is manufactured by the NPO "Soyuzzheldoravtomatizatsiya."

The "Kurs" operations and engineering communications system is designed for the organization of wired radio-telephone communications networks in railroad transport. It includes the KTS-SS complexes of technical communications facilities for organizing a telephone network between studios and railroad systems, and PSO equipment for rolling stock communications to organize two-way links with the supervisors of engineering and

other types of operations, as well as a public address system for passengers and a rack for voice-frequency dialing.

The "Kurs" system is highly reliable and accessible for repair. The number of different types of technical equipment has been reduced in it. The system was developed by the VNIIZheldoravtomatizatsiya. The Leningrad, Losinoostrovskiy, and Kharkov "Trans-svyaz" electrical engineering plants of the NPO "Soyuzzheldoravtomatizatsiya" are manufacturing the "Kurs."

In railroad passenger transport, the achievements of scientific and technical progress are being utilized through the widespread introduction of modern automated reference information systems and automated facilities for selling tickets, storing carry-on baggage, and so forth. The "Ekspress-2" All-Union system for controlling ticket sales was on display at the "Zheleznodorozhnyy transport-89" exhibition. It was developed to automate the processes of controlling passenger service in railroad transport. A unified computer network for collective use based on regional ASU's [automated control systems] serves as the foundation.

The regional systems of the "Ekspress-2" interact in real time. The functioning of the assigned bank of seats on long-distance trains which utilize the entire railroad system, access to it for any subscriber in the All-Union system, and the execution of all technical functions of the regional systems are provided for as well.

The "Ekspress-2" makes it possible to obtain information on the availability of seats on long-distance trains in the entire railroad system. In addition, the system keeps a financial and statistical record of the passengers transported and has the capability of automating a search for passengers' baggage. The "Ekspress-2" is an open system and is able to increase its capacity and connect up to other, foreign systems to register international orders and to utilize international codes for stations. Its utilization increases seat use on trains by 5 percent and labor productivity by 2.5 times as much.

The "Ekspress-2" makes it possible to take 10 million orders per day, and ensures that one passenger is served in up to 1 minute, that the waiting period to have an inquiry answered is no more than 1 second, and that the seat reservation period is up to 63 days. The system includes 13,320 service terminals; it can serve up to 2,500 trains and 256 stations on one train's route, 16 routes for coupled and through cars in one train, and six alternates for a trip in one order. The communications network for the system consists of telephone channels and physical lines.

The "Ekspress-2" was developed by the VNIIZhT, the VNIIZheldoravtomatizatsiya, the IVTs [computer centers] of the Moscow and October Railroads, and enterprises of the USSR Ministry of the Radio Industry and "Vilati" (Hungary); it is manufactured by organizations of the USSR Ministry of Railways and the USSR Ministry of the Radio Industry and Hungarian enterprises.

The KA-112 cash register and the KKhS-8A storage room were among the displays of automated passenger services at the exhibition.

The automated systems for controlling technical processes and the complex of automated workstations (ARM) attracted particular interest among visitors to the exhibition. For example, the integrated system for automating day-to-day traffic control on a line was developed on the basis of the "Robotron-1715," ES1840, SM-1800, and SM-1810 personal computers. The data processing center is equipped with the fast ES series computer, the MPD terminal multiplexers, and other communications and terminal equipment. The system provides an alternative for interaction between the PEVM [presumably: personal computers] and the railroad automation facilities.

The integrated system for automating day-to-day traffic control is designed for automation of the workstations of the duty stationmaster, the operator of the technical office, the train dispatcher, the work assigner for locomotive brigades, and the line traffic control dispatcher. It provides for the preparation of train documents and the recording of operations involving trains, locomotives, and brigades, as well as the exchange of information among individual ARM's at stations.

With the use of this system, data are provided on the train's rolling stock and its movement to the train dispatcher, the performance of train work at each station and for the section as a whole is taken into account, and the schedule of train movement in the section is displayed. Within the limits of a line, the system resolves the problems of composition for locomotives, and accounts for the switching of cars and trains by junction points, as well as loading and unloading.

Among the complex of automated workstations shown at the exhibition is the ARM for the duty stationmaster. It prepares and refines the schedule for train traffic and prints it out in the form of a list or timetable for use of the station's tracks, it automatically keeps the duty stationmaster's log, it records and analyzes the arrival and departure of trains and violations of the timetable and specialization, and issues report forms.

The ARM for the duty stationmaster processes and keeps track of telegrams coming to the station and issues various reports on a change in trains' rolling stock and their replacement or the assignment of additional cars. The ARM is based on the "Robotron-1715" PEVM.

The ARM's for the train dispatcher, the duty depot master, and others were also displayed at the exhibition. They were developed by specialists of the NPO "Soyuzzheldoravtomatizatsiya."

Let us examine the displays of the exhibition's foreign section. Most of the space for enterprises of the People's Republic of Bulgaria was occupied by two consoles—the console-panel for MRTs [route control and relay interlocking] at small stations and the control console for the automated gravity yard interlocking microprocessor

system (the MRTs and GATs [automated gravity yard] systems themselves were not displayed).

The MRTs console-panel is a signaling key console [pult-manipulator] and a light panel combined in one design built of mosaic elements of the "Domino" type measuring 40 by 40 millimeters. The panel consists of eight rows of 30 elements each. Light-emitting diodes are used for the indicating lights. The key console accommodates up to 103 buttons and another 13 buttons with electromechanical counters.

A distinctive feature of the console, which simplifies its installation and makes it possible to add the necessary corrections easily when a station's track distribution is changed, is that each mosaic element of the illuminated panel and the keyer is equipped with its own "personal" cord and plug. This cord connects up to the so-called ranking frames, which have outlets to 30-contact plug and socket units for the console's outside connections.

The same principle of plugged connection for individual control and monitoring components is applied in the control console of the GATs microprocessor system. On its horizontal panel are arranged buttons for controlling switches and indicators of the status of rail circuits, positioned in accordance with the station's track distribution, buttons for controlling the gravity yard light signals and car speed reducers, which are utilized under manual control, as well as functional buttons for the input of data from the classification record into assignments of the system's mode of operation when the switches are controlled automatically.

The vertical panel of the GATs control console accommodates elements for control of the devices for coordination with route control and relay interlocking in the receiving park, the buttons for turning on the system and selecting the power supply modes, as well as indicators showing the course of train sorting and the status of external devices and the power supply and indicators showing the data input from the classification record.

Installed inside the console is a cassette with two microcomputers and circuits coupled with devices for sensing and processing signals from the console, controlling the display, receiving data from the microcomputers installed in the control room, and transmitting data to these microcomputers. The control console for the gravity yard measures 2,600 by 900 by 1,180 millimeters.

And although the gravity yard automation system as a whole was not on display, a spiral hydraulic car retarder was shown. It consists of a rotatable drum with a spiral edge which resembles a meat grinder. The car wheel which runs into this edge turns the drum, consuming kinetic energy. Several retarders, calibrated for the various entry and exit speeds of the uncoupled cars, are installed in sequence on the incline part of the gravity yard.

Among the Bulgarian displays at the exhibition was a **microprocessor system of centralized traffic control**. It is

based on two main microcomputers (a basic one and a standby one) which are included in series in a local busbar. Connected to this busbar are interactive subsystems which are the workstations of dispatchers with microcomputers for controlling a standard periphery and hard and floppy disk units on which the plans for traffic at each station in the monitored section are recorded.

The data are put on the dispatchers' color displays, as well as on a panoramic panel. For the section between Sofia and Plovdiv, a distance of about 160 kilometers, this panel is 16 meters long.

Semiautomatic **public address equipment of the "Digiton-4" type** was displayed in the section for the Hungarian People's Republic. It is designed for installation in railroad terminals and bus stations with a small passenger flow. The equipment is provided with reprogrammed fixed memory storage. A set of announcements in any language can be stored in it. An announcement in two languages can be reproduced at the same time.

It is controlled with the aid of a microcomputer and it has the capability of monitoring traffic. The "Digitron-3" equipment, which is similar, is installed in the locomotive engineer's cab for announcements to train passengers.

The German Democratic Republic displayed the **AZ2 MR electronic axle counter**, which is designed to monitor the availability of station and line tracks and switching sections. It can also be used to monitor sections with or without switches in gravity sorting yards.

The axle counter was designed in accordance with safety principles for automated and remote control devices for railroads, that is, it is protected against a dangerous failure, and in case of any malfunction it will provide information on the occupancy of the track section being monitored.

In the most ordinary case, the section monitored is equipped with two so-called counting points—at the entrance and the exit. Each one has two-way blocking. There are two transmitting and two receiving coils which are mounted on the rail web on both sides of one rail.

All the data is processed by two microcomputers which are synchronized. The correctness of their operation is verified continuously by comparators, and the comparators themselves are checked cyclically by diagnostic programs.

The counter operates when the train speed is up to 250 kilometers per hour and is able to count up to 1,023 axles. Power consumption is from 60 to 100 watts, depending on the number of counting points; there may be up to four of them for one counter. The outdoor equipment can operate in the temperature range of minus 30 to plus 60 degrees Celsius. Over 500,000 axles are counted before one error may appear.

The display of the Polish People's Republic's ("Kolmek") Foreign Trade Association occupied an entire

pavilion. Visitors could see electric slave clocks, transistorized converters for guaranteed power supply to devices, the type EEA-4 switch electric drive, the SOT-2 and EON-3 rail circuits, the IRF relay, and a number of other displays.

The EEA-4 switch electric drive is produced in different versions. There are versions of the electric drive that cut in and do not cut in [vreznyy, nevreznyy] with direct current of 136 and 220 volts and alternating current of 220 or 2 times 380 volts. The switching time fluctuates from 0.5 to 5.2 seconds. This makes it possible to utilize it in gravity sorting yards and ETs [electric switching centralization] devices at stations.

The SOT-2 rail circuits operate in the voice frequency bands. Their basic advantage is that rail bonds are not required for them. For operation at low frequencies from 1.5 to 3 kilohertz, the length of the rail circuit is up to 1,200 meters, and with working frequencies of 8 to 20 kilohertz, it is up to 600 meters long.

The EON-3 rail circuit is essentially an electronic rail contact. It averages about 25 meters in length.

The ("AZhD") Railroad Transport Automation Enterprise displayed its output in the CSSR section. This is essentially a major association which includes scientific research, design and planning organizations, plants, a tekhnikum, and a physical production and warehousing base. The ("AZhD") association's displays included **an electronic telephone switchboard and a radio broadcasting system for loudspeaker warnings.**

Calls and functions are displayed by light-emitting diodes and buttons are used for control. The switchboard receives its power supply from a 220-volt, 50-hertz network. Backup power is provided by a 24-volt storage battery.

The loudspeaker warning system operates on six circuits, each one of which may have up to 200 watts. The overall capacity of the central equipment is up to 800 watts (8 units of 100 watts each). The system provides the opportunity both for a public address warning as well as a "quiet" conversation with a subscriber in a telephone booth. The installation also includes a set of equipment for wired broadcasting to control switching operations at a station.

The British firms General Signal and Westinghouse Signal, the basic suppliers of STsB [signaling, centralization and blocking] and communications equipment for Britain's railroads, had a large display at the exhibition.

The General Signal firm displayed **the simulator for training Soviet specialists to operate the control apparatus for the "Saturn" project**, on the basis of which an integrated automation system for controlling train traffic on the Moscow-Kalinin section is being developed.

Both the British firms displayed **microprocessor interlocking and electronic staff blocking** for less active lines. It is interesting that all assemblies in the systems, regardless of which firm is the supplier, are interchangeable: by

assigning primary importance to the customer's interests, the firms have unified their output in spite of their competition.

One more British firm—(Chronos) Richardson—displayed the **"Railweight-9200" system for weighing cars in motion.** Bridge scales utilizing strain gauges provide a high degree of accuracy in measurements. Cars with solid and liquid loads are weighed differently: in the first case the weight of the axle or truck is determined, and in the second case the entire car is weighed, since liquid may be shifted in motion, which misrepresents the results.

However, weighing in itself is only part of the functions performed by this system. It also keeps a record automatically and records the weight of rolling stock. For this purpose, the system includes a 16-bit microcomputer capable of making a high-speed analysis of the weight at the rate of 1,000 readings per second.

The microcomputer operates together with track sensors which make it possible to determine the type of car (two- or four-axle), the front and rear parts of the car, and the speed and direction of movement. The sensors also indicate the locomotive, which is excluded from the weighing operation.

For example, in approaching a loading point the system weighs each empty car after determining its number in a consist. On a return trip a loaded consist is weighed and the weight of the freight in each car is determined according to the difference in readings. All this information is stored in the computer and when interrogated by the operator it may be displayed or printed out by pages. The printout is essentially a trade and transport invoice which indicates the type of freight and it may be used as a financial accounting document.

There is one more area where automatic scales are used—the automated installation at gravity classification yards. If these scales are installed on the approach to sorting, it is no longer necessary to determine the weight category of a car when it is rolling down; all the data needed are put into the system for sorting management in advance.

The British firm Kinnear Newby and Associates displayed its own version of a **rolling stock identification system.** An on-board device is a passive removable transceiver, attached to a car or locomotive with one bolt without any external connections or switches. Up to 64 bits of data, which provide for over 18×10^{18} different encoded combinations, can be programmed in it.

The ground devices include an antenna installed inside the track and a cabinet with electronic equipment for reading and processing the data. When rolling stock passes over the antenna it emits energy toward the on-board transceivers. This energy actuates the circuit of the transceiver, which transmits the number or code recorded in it in the opposite direction toward the antenna. The antenna receives this information, which is registered in the readout equipment and stored there in

the appropriate device. At the same time, information on the time and location of the readout point is added to the car's code. When interrogated by the central computer, all the information goes to the dispatch center.

Firms from Finland also displayed **rolling stock identification systems** at the exhibition. The ("Rautaruukki") firm displayed the "Transtekh" automated system for identifying transport facilities and tracking them. It consists of code carriers which are attached to a means of transportation, containers, or other objects; identification stations situated at strategic points of importance in the network; and systems for transmitting data from stations to a computer and computing hardware and programs.

The identification code consists of 20 symbols, and not only the car number can be encoded, but the destination station and the type of freight as well, for example. This last information is especially important when dangerous freight is being shipped. The record of the data in the code carriers may be made with the aid of a separate programming device.

The identification station includes an antenna, a radio frequency module, consisting of a generator and rectifier, and a readout device. The radio frequency module continuously emits a low-power signal through the antenna. When the code carrier passes by the antenna, this signal is echoed, and the echoed signal is modulated in accordance with the code in the code carrier. The reflected amplitude-modulated signal in the rectifier of the radio frequency module is again transformed into an identification code. Thus the code carrier is not a sensor, but a passive reflector.

Depending on the information being encoded and the system's configuration, it can perform different additional tasks; for example, it can determine the location of specific freight on a real scale, and when there is an accident at a classification yard it will report the location of all cars with dangerous loads.

The range of the readout signal reaches 75 meters, and passive code carriers can be used up to 12 meters. When necessary to provide for longer distance, code carriers with battery power are used. This type of battery lasts for 8 to 10 years. A reliable readout of data is provided at speeds of up to 300 kilometers per hour.

Various kinds of **two- and three-element scales** are provided by the ("Pivoteks") firm. Depending on the length of the car, weighing is performed by one element, two adjacent elements, or two elements on the end. The scales are based on strain-measuring sensors.

A feature of the ("Pivoteks") firm's scales is that they do not require that a pit be available, and they are installed directly on the track. The data processing systems coupled with the scales significantly extend the functional opportunities for their use.

The ("Teleste") firm displayed a **series of telephone systems**. They are very versatile. As an example, the

SLO-200 system provides for internal and external conversations, and it can readdress incoming calls. When leaving the workstation, all incoming calls can be readdressed automatically. If the subscriber needed cannot be contacted, he can be left a request to call. This request will be indicated on his equipment panel, and just the press of a button is sufficient to answer it. The time is indicated on the telephone set, and this clock can emit an audible sound at the necessary time. The telephone number dialed, as well as the number of the subscriber calling, are indicated on the same panel. Information on the time of return can be left.

Specialists were interested by the modest display of the Finnish ("Eksel") firm—a **lining of epoxy resin** with a high fiber glass content for insulating joints. More than 20,000 such linings have been installed on Finnish railroads, which are operated under difficult conditions. They can function in the temperature range of minus 40 to plus 50 degrees Celsius and provide insulation resistance for a joint of no less than 79 kilohms in damp weather, and they require practically no maintenance. The advertising prospectus states that "the period of service is endless."

The Standard Radio and Telephone firm from Sweden displayed the **ATS system of automatic train control**, which is also called "the driver's electronic helper." Incidentally, the use of this system really makes it possible to have one locomotive engineer on board without an assistant.

The ATS system is the point-contact type. It utilizes point-contact sensors installed at specific locations. These sensors can transmit either continuously programmed information, such as before curves, or the information in them can be changed at sensors located before a signal which are transmitting information on the signal reading. The track sensors are passive, they do not require a power source, and they receive energy from the locomotive's antenna. In addition to this antenna, the locomotive equipment includes an on-board micro-computer and a locomotive display.

The basic purpose of the system is to monitor train speed, taking into account all the restrictions in effect, warning the engineer of dangerous situations and stopping the train if he does not react to the system's warning signals.

Before the start of a run, the engineer specifies the maximum speed for a given train on the panel (if the track condition and signal readings permit a higher speed, the system will still limit its permissible settings for a specific train), the length of the train (if there is a section with a speed restriction, the system will permit the train to increase speed after the end, not the front, of the train leaves this section), the train's complete weight, and the number of axles equipped with brakes. All these data are utilized by the computer for the automatic braking of the train.

When a train passes over a point-contact sensor located between the tracks, it receives a signal on a frequency of

27 megahertz emitted by the on-board antenna. The electromotive force induced in the receiving antenna of the sensor is transformed to the necessary level and rectified and utilized to provide power for the internal circuits incorporated in the integral elements.

On the locomotive, the report received is transformed and fed into microcomputers. Accordingly, it would be more accurate to call this assembly a processor unit, since it consists of three microcomputers which operate at the same time with one program. In addition, the processor unit stores data put in by the engineer, as well as data on the actual traffic conditions. A continuing measurement of speed, distance and pressure in the train's brake line is made in the system for this. By comparing these indicators, the system emits warning signals to the engineer when necessary.

Two types of track sensors are used in the system—information sensors and so-called "marker" sensors which do not transmit useful information, but only indicate their presence. This is done to ensure traffic safety for trains in case of a malfunction when the sensor is damaged. If a signal from a track sensor is not received at the appropriate place, this is considered a malfunction. The Swedish state railroads and suburban lines on the west coast of Australia have been equipped with the ATS system.

The Siemens firm from the FRG also displayed a **point-contact system of controlling train traffic**. This system uses an inductive method of transmitting information from the track to the locomotive.

The display of the West German ("Khaukhinko") firm showed a **truck for transporting cars at stations and on plant tracks**. The device is positioned inside the track and has a cable linkage. Various types of trucks of different capacity are being turned out. They can be used for separating and making up trains at stations without gravity yards, on the loading tracks of classification yards, and they can be used as car checkers. The pushing force of the transport trucks reaches 50 kilonewtons (5 ton-force).

Among the displays by the Bellomi firm from Italy were **passenger service automation devices**. The SIC-100 information system includes a self-service station providing information on train arrivals and departures. It provides passengers with information on schedules, the selection of alternate routes, and the distance and cost of a trip. In addition to these stations, the system includes a subsystem for information on actual arrivals and departures, various information panels and monitors, and a voice broadcasting subsystem. The SIC-100 system was built with computer hardware.

A self-service ticket-printing unit made by this firm provides essentially an entire information-computer system. It has a printer for printing the tickets, a device for accepting bank notes or credit cards, color and graphics monitors, a sensor keyboard, and a device for returning change. One of the types of this ticket unit provides for communication among several ticket units

with the aid of modems. This means that the operation of the ticket units can be remotely controlled and that complete statistical data can be obtained daily.

Photo Captions

1. p 19. The display of the NPO "Soyuzzheldoravtomatizatsiya."
2. p 20. The switch electric drive manufactured in Bulgaria.
3. p 20. The automic ticket-printing unit of the Italian Bellomi firm.
4. p 22. Axle counter made in the GDR.
5. p 22. Transporting truck made by the FRG ("Khaukhinko") firm.
6. p 22. Czechoslovak electronic telephone switchboard.
7. p 23. Control panel for gravity yard automatic interlocking, made in Bulgaria.
8. p 23. Simulator for the "Saturn" system made by the British firm General Signal.

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Rail Line Maintenance Management Analyzed

904H0082A Moscow PUT I PUTEVOYE
KHOZYAYSTVO in Russian No 11, Nov 89 pp 12-15

[Article by A. A. Puchko, chief of the Southern Railroad, and V. F. Sushkov, chief of the Lines Service: "The Key to Success"]

[Text] In analyzing the railroad's operations indicators, you come to the conclusion that track maintenance continues to be the weakest link in the transportation production line. It has been said for a long time that the foundation of rail transport is the track with all its equipment. The opinion is completely justified, because the condition of the superstructure depends directly on the condition that the substructure is in, after all. However, for many years, and even now, it is precisely the superstructure which we have been persistently updating and renovating, without looking after the foundation as we should: we have updated the fleet of locomotives and cars, we have sought to increase the weight of trains and traffic speed, we have electrified entire routes, we have introduced new STsB [signaling, interlocking and blocking] and communications facilities, we have built new locomotive and car depots and renovated old ones, and we have extended station track in order to improve the traffic flow of long and heavy trains. In a word, we have been overburdening the substructure and we are continuing to do so, without thinking about the main question: can the track bear all this, and will its operational reliability be provided for? There is no doubt that a line with rails and switches of the R65 type has an adequate structural safety margin. But does it have a reserve of operational reliability?

Experience and analysis of the breakdowns that take place demonstrate that under current conditions, railroad workers are not always able to consistently ensure that tracks and other equipment are operationally reliable for a number of well-known objective and subjective reasons. While a safety margin has always been incorporated in each element of the superstructure and in the structure as a whole, there is no question that the margin of operational reliability that is necessary is established by the brains and efforts of the railway workers and their responsible attitude toward their work and the system of line maintenance.

Both the first and the second process are controllable.

The current state of affairs persuades us that we cannot count on achieving high results in the railroad's performance unless the line's operational reliability is improved at an accelerated pace. This is task number one. Solution of it depends completely on the system of line maintenance management.

In recent years the MPS [Ministry of Railways] has issued a number of normative documents which provide for a partial change in the system by shifting to mechanized track maintenance (Order No 27Ts of 17 July 1987) and improving the organization of current maintenance and work incentives (Order No 38Ts of 17 October 1988). A sectorial scientific and technical program was approved (Directive No 83-U of 23 January 1986), and steps were taken to assign personnel (Directive No 157-U of 24 March 1989) and to build housing and improve living conditions for railroad workers (Order No 40Ts of 17 September 1984). At the same time, proper attention still is not being given to one of the most important matters—improvement in the structure of line maintenance management.

Work has been under way on the Southern Railroad to implement the normative documents cited. Program documents have been drawn up for the railroad, taking the actual state of affairs in line maintenance and regional characteristics into account. It is necessary to carry out the program outlined as expeditiously as possible, but a number of serious problems are emerging in this regard. The main one is that line maintenance is not being adequately financed. There clearly are not enough funds which could be allocated quickly to implement the line programs. For our part, we are naturally looking for internal resources, but we also need the ministry's financial assistance to support the orders it has issued.

The state of affairs with respect to line maintenance on the Southern Railroad can be improved only if the management structure is fundamentally changed. Structural changes are not a tribute to fashion. This is a fundamental step, one of the key tasks whose implementation will make it possible to ensure that the line has consistent operational reliability, to more fully utilize the additional reserves to increase the line's efficiency, to improve the efficient use of all facilities' fixed capital, and to reinforce the safety of train traffic.

Changes are being introduced in the management structure that has taken shape on a number of railroads. The "Remput" Association was established on the October Railroad in 1988, the structure and work performance of the OPPKh [possibly: Track and Line Maintenance Association] on the Central Asian Railroad is well known, and the North Caucasus Railroad has proposed that an experimental association for mechanized line maintenance and repair be established. Shifts on the Belorussian Railroad are common knowledge as well.

Some 15.5 percent of all Southern Railroad workers are employed in line maintenance, and 18.8 percent of all expenditures are devoted to this. The cost of fixed capital accounts for 36.5 percent of expenditures. About 50 percent of all major repair of this fixed capital is performed by railroad workers. Line maintenance accounts for 71 percent of the industrial production. The volume of work (in standard units) which falls within one line subdivision averages 796.7 units, whereas the established norm for a subdivision in the first group is 750 units. The volume of work for line subdivisions ranges from 334.6 units to 1,076 units.

We consider the dual subordination of line subdivisions—to the service and a division of the railroad—to be the basic reason that perestroika is necessary in line maintenance management. The lines service performs production planning, provides organizational and technical training for enterprises, provides material support and financing for major repair of the line, monitors its technical condition, and carries out functions of day-to-day technical management. But the railroad's division finances the operational activity of the subdivisions. Under this system, the economic levers of management are held by the railroad's division, but the technical levers are held by the lines service. Clearly an abnormal situation!

Violation of the basic principle of management unity leads to the formation of parallel management organs, a decline in responsibility, disintegration of efforts by subdivision collectives, and an increase in the volume of operating information and accounting and records documents. None of this contributes in the least to a purposeful solution of the problems facing the line subdivisions. The dual subordination and parallelism in management have reduced railroad workers' interest in the end results of their work. There is also dissociation between the production interests of the line subdivisions and the PMS [track machinery stations].

A management structure is needed which will make it possible to consolidate the production interests of the subdivisions and the PMS, to delegate more rights and responsibilities in economic activity directly to each labor collective, and to turn their attention toward a program to improve the line's conditions, to improve its operational reliability, and to eliminate unproductive losses, and toward profitable operation through a system of internal cost accounting relationships and incentive levers.

Analysis of practical experience in changing the structure on other railroads has shown that a railroad association, all of whose subunits have been removed from the railroad division's subordination, meets current requirements the best. This association should be financed in accordance with stable, calculated rates of income for each adjusted kilometer of track. This management structure, taking into account the new methods of forming a wage fund and introducing a scale of taxation to increase it, will make it possible to revise the outdated and incomplete indicators of economic activity for line subdivisions and to shift the association to the second model of cost accounting. This in turn will provide the opportunity to raise the wages of line repairmen up to 350 rubles in the next 2 years, it will enable us to resolve pressing social problems of long standing through our own efforts, and it will make it possible to reinforce personnel in line maintenance. Highly skilled personnel, plus mechanization of line maintenance, plus a new management structure—this is the formula for improving the line's operational reliability and traffic safety.

The cost accounting income of the collective will become one of the basic indicators of the economic activity of the railroad line association.

The Southern Railroad has worked out two versions of a new structure for line maintenance management.

The first version provides for the establishment of a cost accounting association with an independent balance for line repair and maintenance (the standard name "Remput"), based on the lines service staff with direct subordination (financial and day-to-day) to it of these structural units: 17 line subdivisions, 8 track machinery stations, 5 protective afforestation subdivisions, and 3 industrial enterprises. In the process, three of the 20 line subdivisions in low-activity sections are broken up and merged with others. The boundaries of the subdivisions are changed as well.

The work force of administrative and management personnel in the line subdivisions remains unchanged, but it is reduced in the remaining production units through the internal structural changes. The staffing of divisions as a consequence of the subdivisions' shift to balanced operation is reduced somewhat in common departments: personnel, planning, finance, labor and wages; it is partially reduced at the expense of employees of the track and civil structures departments. The staff of safety inspectors (URBP) is transferred to the association staff, although their subordination to the inspectorate of the railroad management is retained in the process. The inspectors of track repair quality are also transferred here. The association's own staff is made up of employees of the lines service and parts of the contingent released in divisions and structural units.

After all the reorganizations, there will be a total reduction of 75 individuals among administrative personnel.

Model Management Staffing in a Line Repair and Maintenance Association

Administrative and Management Personnel

Chief of the association	1
Chief engineer	1
Chief mechanic	1
Deputy chief for operations	1
Deputy chief for capital operations	1
Engineer for special operations	1
Clerk	1
Personnel Department	4
Operations Department	5
Capital Operations and Industrial Enterprises Department	6
Shift engineers	4
Mechanization Department	4
Labor Safety Sector	2
Technical Department	5
Engineering Structures Department	3
Inspection and Control Department (traffic safety inspectors and repair quality examiners)	9
Bookkeeping and Finance Department	7
Economic Planning and Analysis Department	7
Labor and Wages Department (including a lawyer)	4
Material and Technical Supply and Complete Units Department	9

Personnel Not Part of Administrative and Management Staffing

Process engineers	2
Secretary-typist	1
Total	79 persons

The first version represents a sectorial management structure and at the same time, dual subordination of enterprises is eliminated and centralization of funds is provided for production development and the solution of social problems. The association operates in conformity with the status of a production association which contains structural units.

The second version provides for the establishment of a "Remput" Association and five operations and repair administrations directly subordinate to it, one OPMS [unified track machinery station], and one industrial production association. REU-1 and REU-2 [operations and repair administrations] each include three line subdivisions, two track machinery stations, and one protective afforestation subdivision; the proportion of these three enterprises in REU-3 is two, one, and one, respectively; the proportion in REU-4 is four, one, and one, respectively; and the proportion in REU-5 is three, one, and one, respectively. One of the enterprises in the REU is considered the lead enterprise. In the process, three subdivisions, just as in the first version, are being broken

up. There are two crushed rock plants and a rail-welding train in the industrial production administration. All heavy track machinery will be kept by the independent enterprise OPMS-265.

Under this structure, the work force of administrative and management personnel in the structural units, except the lead units, is reduced by transferring the basic functions of administration (finance, production, planning, and so forth) to the lead enterprise. The enterprises' own staffs are also reduced, but the production work force (foremen, works superintendents, and others) remains unchanged. The safety inspectors (URBP) are included in the work force of the lead enterprise and remain subordinate to the inspection staff of the administration. Management staffing of divisions is reduced as in the first version. There are less personnel staffing the association in this version than in the first version, since there are less enterprises in the association. The administrative and management work force is reduced as a whole by 164 persons.

This version also represents a sectorial structure of management, but the number of line enterprises is reduced substantially. Establishment of the REU's will make it possible to carry out the entire range of operations related to the maintenance and repair of the line within the limits of management through their own efforts.

After thorough study of both versions, the railroad's technical and economic council considered the first version more acceptable as the initial stage in perfecting the structure of line maintenance management, based on the extent to which the lines service is technically equipped. Introduction of the second version is not possible at present. First of all, certain track machinery stations still cannot accommodate the work volumes required. Secondly, with the lack of an automated system to control line maintenance, control of the REU sub-units' production and financial activity may be weakened. Moreover, such an extensive reorganization of the management structure is complicated psychologically as well, since it affects people's futures to a greater extent than the first version.

Relationships among the association, its structural units, the administration and the railroad's divisions will be based on contract principles.

The draft of contract conditions between the line repair and maintenance production association and the railroad's divisions includes the following basic provisions. The production association will be obliged:

- to provide for the safe movement of trains at established speeds;
- not to exceed the number of warnings on the train speed limit established for each specific division, based on the condition of the track;
- to ensure trouble-free operation of track circuits; and

—to fulfill the plan for track maintenance operations with high quality in the periods established.

The railroad division will be obliged:

- to assign "windows" for repairs and current maintenance of the line according to the plan; and
- to allocate the number of cars, flatcars, and locomotives needed to organize line maintenance and repair and to provide for all the association's transport needs.

Cases of defective work and accidents through the fault of the association on the division's territory are reviewed jointly and steps are taken to prevent them.

Both sides bear economic responsibility for violating contract commitments. The railroad division is responsible for not making "windows" and rolling stock available in the period of time established. The association is responsible for keeping the "windows" too long and for exceeding the number of warnings stipulated by the schedule. Where there has been damage to power supply, signaling and communications facilities or locomotives, the association compensates for the expenses to repair the damage in accordance with the bills presented to it.

The association is financed by the railroad administration, and the structural units are financed by the association. Accounting prices are introduced. The contracts specify:

- the volume of work for operations activity (line maintenance) in adjusted kilometers, and the accounting price for 1 adjusted kilometer and the total sum;
- the volume of work in each type of line repair in kilometers, sets of equipment, and other units, the estimated cost of a unit and the total cost of the work;
- the volume of work to maintain protective afforestation areas in adjusted hectares, the accounting price of 1 adjusted hectare and the total sum; and
- the volume of work involved in major repair of planted areas, the estimated cost of a unit, and the total cost.

The association will base its financial activity on normative distribution of income.

The association's cost accounting income will be formed:

- from the total income obtained from the repair that has been performed, from line maintenance, and from other types of work associated with operations activity;
- from the total income obtained from ancillary activity, the production of consumer goods, and paid services to the public and other nontransport organizations;
- from the total amortization deductions for reconstruction and major repair;
- from the receipts from the sale of surplus and unused valuables and rent (including for sidings leased); and

—from the sums received from other enterprises for their failure to adhere to contract commitments.

The association makes use of the cost accounting income to compensate for financial losses it has incurred and to pay fines and penalties.

Preliminary studies and the experience of other railroads and departments convince us that introduction of the new management structure, the responsibility of the association alone for the state of affairs in the railroad's line maintenance, effective utilization of economic levers of management by the sector, independence and economic interest in the end result of the work, and opportunities for widespread introduction of the collective (brigade) contract under the current conditions of economic operation—this is the most progressive solution which makes it possible to successfully carry out the task with which the railroad is faced: increasing transport volume by improving operations indicators and work quality.

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MARITIME AND RIVER FLEETS

Concern Over Nuclear-Powered Lighter Carrier Continues

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INDUSTRIYA in Russian 14 Nov 89 p 3

[Article by V. Androsenko, SOTSIALISTICHESKAYA
INDUSTRIYA correspondent: "You Gave Us a Steam-
boat..."]

[Text] This was the title of a letter published on 25 May. G. Khalatov, chief radiologist of Magadan Oblast, shared his fears about using the nuclear-powered Sevmorput.

I. Alekseyev, deputy minister of the USSR Shipbuilding Industry, sent the editors a reply, in which he says: "The Ministry of the Shipbuilding Industry has examined the letter, 'Nam podarili parokhod...' [You gave us a steamboat...]. The author made a number of incorrect statements in the letter. For example, he informs us that even diesel-electric LASH ships, less expensive than the Sevmorput LASH ship, are unprofitable. In reality, unprofitability is not a characteristic of a LASH ship of this series.

"Also incorrect is the author's assertion that, in addition to the crew, a large group of shipbuilders took part in the first run of the LASH ship Sevmorput, and worked feverishly to eliminate the numerous defects. There was not a single shipyard representative on the ship during the first run. Only a small number of specialists were on board in addition to the crew—scientists and designers, whose task included studying the behavior of the ship and its equipment under actual operating conditions. None of them, naturally, eliminated any defects. Moreover, numerous defects did not exist, which can be seen from the acceptance statement, signed by a qualified commission of the USSR Ministry of the Maritime Fleet.

"The author's arguments concerning the dangerous consequences if explosives carried in sealed containers should detonate were not based on a realistic state of affairs. It is forbidden to carry hazardous and explosive materials on the LASH ship.

"In indicating that only two nuclear-powered cargo ships had been built in the world, and that both of them had already been written off, the author is not reporting the actual situation with respect to the use of nuclear power on maritime ships. In reality, eight ships for civilian purposes with a nuclear power unit have now been built in the world, including two experimental ones—in the United States, the cargo-passenger ship Savannah in 1962, and the cargo ship Otto Gan in 1973 in the FRG. The ships have been operating for a long time, have visited a large number of ports in many countries of the world and ceased operation at the end of the program of experimental operations.

"Since the conclusions and suggestions of the author's note were based on the above-indicated incorrect prerequisites, the USSR Ministry of the Shipbuilding Industry would like the editors to publish an article that tells, without prejudice and with substantiation, about the LASH ship Sevmorput, and its reliability and safety. This article could be prepared by associates of the Central Scientific-Research Institute imeni Academician A.N. Krylov, or by the Baltudoproyekt Central Design Bureau."

This is an extensive answer. How well substantiated is this refutation of the letter published in the newspaper?

Let us start with the economics. In April of this year, a representative meeting on the problem of developing the LASH ship system was held in Vladivostok under the chairmanship of I. Orlov, chief of the scientific-technical division of the USSR Ministry of the Maritime Fleet. At it, verification of the negative economic results of the work of the diesel-electric LASH ship Aleksey Kosygin was clearly expressed, and no less clearly—the conclusion as to the coming tremendous losses from operating the Sevmorput.

In the process of operating the nuclear-powered LASH ship, it was noted at the meeting, quite substantial problems were revealed, of which three should particularly be mentioned. In the first place, the actual cargo base on routes expedient for using nuclear power proved to be least indicated in the planning studies. In the second place, the natural-navigational conditions of the Far East basin exclude many ports from the sphere of operations of a LASH ship system. In the third place, the Sevmorput, with respect to its technical characteristics, proved to be less adaptable for operation under the complex conditions of the Far Eastern and Northern seas. In the Arctic, on complicated sections of the route, it needed ice-breaker support. Therefore, the main task today, as was emphasized in the protocol, "is to organize the operation of the Sevmorput with minimal losses for the sector and the national economy."

"In this difficult situation, the Far East workers are of a single mind: since you have given us LASH ships, we will use them with the greatest yield," says V. Miskov, chief of

the Far East Maritime Shipping Company. "Especially since there are some positive points here. They have released some of the scarce fleet tonnage from the northern routes, by bringing cargoes in lighters to Petropavlovsk-Kamchatskiy, there is no longer a need to build a 13th container berth at a cost of about 60 million rubles, and the system of processing cargo at Arctic ports and port points has become simpler."

Other variants are being worked out for the use of LASH ships.

Everything is more complicated for a nuclear-powered ship. According to the calculations, losses from introducing it into cargo transport this year (in the seven months of work) are 11-12 million rubles. In the future, when using it for the full navigation period, they will increase to 15-16 million rubles a year. These predictions are also being confirmed in practice: according to the results of six months, the revenues of the Sevmorput are 3.2 million rubles, and the expenditures—7.8 million.

The economics, let us say directly, are strange: the more the ship operates, the greater loss it brings. Our entire system of expenditure accounting is reflected in it as in a drop of water.

First of all, the initial cost of the nuclear-powered ship affects the high degree of unprofitability. It cost the public 168 million rubles to build it. This figure was also determined by the amounts of the depreciation deductions—13 million a year. For the time being they are paid in by the Murmansk Maritime Shipping Company, to whom the Sevmorput is registered. One hears increasingly loud demands, however, to bring in the State to assist, as in the case of the *Otto Gan*, which, although it belonged to a private firm, was maintained by a subsidy of the FRG government. These moods, recurrently, depict clearly the gangsterism of our departments: at first, without asking anyone, they pick the pocket of the taxpayer, to create a nuclear monster, and then they want the same taxpayer to invest in the expenses for its operation.

Incidentally, the actual sum—168 million—arouses some questions. The Sevmorput and the Aleksey Kosygin are practically identical in size, displacement and tonnage of the cargo transported. Even their contours are identical. The latter, however, cost 60 million. Where does the difference lie? Is the nuclear power unit alone really 100 million rubles more expensive than two diesels? Why was the Sevmorput built not at the Kherson Yards, where the Kosygin was laid, and where experience had already been gained and a base created, but at the Kerchensk Yards—practically from "scratch"? Were the expenditures to create the production base and solve the social-everyday problems of the yard not written off to the production cost of the LASH ship?

In speaking of the economics of the Sevmorput, I have not so far referred to the intention to use it to transport containers. This alternative is in general ruinous for our ports. For example, the delivery on the nuclear-powered ship to Magadan was tripled, as compared with the usual, and container consignments inevitably paralyze the work of the transport center, increase the container

turnaround period, and lead to a glut of them. This instantly ricochets on to the Port of Vostok as well. The force of the blow is eloquently defined as the "binomial of Mel," developed in the shipping company and humorously named after the acting chief of the lighter division. According to it, the fines for delay in container delivery alone are over 3 million rubles in a year!

Fortunately, we can now speak of the container alternative only in the subjunctive mood. The protests of the public and publications in the press have made the owners of the nuclear-powered ship give up transporting containers on it and return to the lighter variant: there it can still be seen how much cargo is loaded in the lighters, and moreover, the concept does not require calling at inner harbors and mooring at berths.

Incidentally, the Sevmorput is not even suitable for this idea. The point is that some of the ship's structural peculiarities prevent it from operating in outer roads and in the open sea, for which, properly, LASH ships are designed. The metal frame folding back at the stern, along which the lighters should be lowered, makes it impossible to work with a single screw (on the Kosygin, for instance, there are two of them, and the lighters are let down between them), and the nuclear-powered ship becomes an uncontrolled toy, floating at the will of the waves. When in Amur Bay, where the Sevmorput was anchored with cargo, there was just a 1.5-meter swell. V. Smirnov, its captain, stated in radio-grams to the CPSU Central Committee, the USSR Council of Ministers, the Ministry of the Maritime Fleet and other authorities: "I consider it unsafe to operate in the open roads due to the structural peculiarities of the ship... creating the prerequisites for a maritime accident on a nuclear ship is impermissible" and... requested to put in to the inner harbor of Vladivostok. Who could know the potentials of a ship better than the captain?

Alongside this "structural peculiarity", which, according to the conclusions of specialists, reduces navigation time by 50 percent, the 200 claims for replacement for imperfections and defects look like absolute trifles, even though the reply of the Ministry of the Shipbuilding Industry maintains that there were no defects on the ship, for the acceptance document confirms this. All right, let us look at the situation, as Kozma Prutkov advises: "If you read a sign 'buffalo' on the cage of an elephant, do not believe your eyes."

"Using the example of the Sevmorput, our sectorial thinkers obviously decided to show the world how not to do things," says N. Dronov, chief technologist of the DVMP [Far East Shipping Company] Port Service, "our shipping company is simply gasping for breath without pallet-carriers, which are convenient and extremely profitable to operate. Instead of them, however, they 'give' us unprofitable giants, which seriously threaten to undermine the entire economic system of enterprises. As if in mockery of our 'farsighted' technical policy, a Japanese cargo ship with a wind propeller recently arrived at the Port of Nakhodka. It should be placed alongside the nuclear-powered Sevmorput—for comparison!"

Finally, I asked V. Miskov, chief of the shipping company, what they would do if the Murmansk people, who also have begun to count kopecks, would stop paying the yearly multi-million contribution to maintain the nuclear-powered ship.

"It goes without saying, we would immediately reject the Sevmorput," answered Viktor Mikhaylovich.

Indeed, you can see that this gift "horse" is no better than the Trojan Horse.

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